ATLAS OF SURFACE MIXED LAYER CHARACTERISTICS FOR THE SCOTIAN SHELF AND THE GULF OF MAINE

B. Casault, A.F. Vézina and B. Petrie

Ocean Sciences Division
Maritimes Region
Fisheries and Oceans Canada

Bedford Institute of Oceanography
P.O. Box 1006
Dartmouth, Nova Scotia
Canada B2Y 4A2

2003

Canadian Data Report of Hydrography and Ocean Sciences 164

Fisheries and Oceans Canada
Pêches et Océans Canada

Canada

104-02181/

Canadian Data Report of
Hydrography and Ocean Sciences 164

2003

ATLAS OF SURFACE MIXED LAYER CHARACTERISTICS FOR THE SCOTIAN SHELF AND THE GULF OF MAINE

by

B. Casault, A.F. Vézina and B. Petrie

Ocean Sciences Division
Maritimes Region
Fisheries and Oceans Canada

Bedford Institute of Oceanography
P.O. Box 1006
Dartmouth, Nova Scotia
Canada, B2Y 4A2

© Her Majesty the Queen in Right of Canada, 2003
Cat. No. Fs 97-16/164E ISSN 0711-6721

Correct Citation for this Publication:

Casault, B., A.F. Vézina and B. Petrie. 2003. Atlas of surface mixed layer characteristics for the Scotian Shelf and the Gulf of Maine. Can. Data Rep. Hydrogr. Ocean Sci. 164: v + 306 pp.

TABLE OF CONTENTS

Abstract/Résumé v

1. Introduction 1

2. Data source and retrieval 2

3. Data processing 4

4. Quality control 6

5. Results 7

6. Acknowledgements 10

7. References 10

LIST OF FIGURES/TABLES

Figure 1 Scotian Shelf and Gulf of Maine climatological subregions 11

Figure 2 Mixed layer characteristics as calculated from observed profile data : an example 12

Figure 3a Pseudocode for the quality control procedure (criterion #1) 13

Figure 3b Pseudocode for the quality control procedure (criterion #2) 14

Figure 4 to Figure 76 15-306
a) Temporal and spatial distributions of observed profiles for subregion "x"
b) Calculated mixed layer characteristics for subregion "x"
c) Monthly statistics of mixed layer characteristics for subregion "x"

Table 1 Depth structure used for bin averaging of profile data 4

Table 2 to Table 74 15-306
Monthly statistics of mixed layer characteristics for subregion "x"

Region	Name	Pages	Region	Name	Pages
SS1	Sydney Bight	15-18	SS38	Central Georges Bank	163-166
SS2	N. Laurentian Channel	19-22	SS39	S.W. Georges Bank	167-170
SS3	S. Laurentian Channel	23-26	SS40	N.W. Georges Bank	171-174
SS4	Banquereau	27-30	SS41	Massachusetts Offshore	175-178
SS5	Misaine Bank	31-34	SS42	Rodgers Basin	179-182
SS6	Canso	35-38	SS43	Crowell Basin	183-186
SS7	Middle Bank	39-42	SS44	Jordan Basin	187-190
SS8	Gully	43-46	SS45	Truxton Basin	191-194
SS9	Sable Island	47-50	SS46	Sigbee Basin	195-198
SS10	Western Bank	51-54	SS47	Wilkinson Basin	199-202
SS11	Emerald Bank	55-58	SS48	Jeffreys Ledge	203-206
SS12	Emerald Basin	59-62	SS49	Massachusetts Inshore	207-210
SS13	Eastern Shore	63-66	SS50	Southern Maine Inshore	211-214
SS14	South Shore	67-70	SS51	Platts Basin	215-218
SS15	LaHave Basin	71-74	SS52	Central Maine Inshore	219-222
SS16	Saddle	75-78	SS53	S.W. Fundy	223-226
SS17	LaHave Bank	79-82	SS54	Central Fundy	227-230
SS18	Baccaro Bank	83-86	SS55	N.E. Fundy	231-234
SS19	Roseway Bank	87-90	SS56	Cape Cod Slope	235-238
SS20	Shelburne	91-94	SS57	Nantucket Sound	239-242
SS21	Roseway Basin	95-98	SS58	Nantucket Shoals	243-246
SS22	Browns Bank	99-102	SS59	Great South Channel	247-250
SS23	Roseway Channel	103-106	SS60	Outer Nantucket Shoals	251-254
SS24	Lurcher Shoals	107-110	SS61	Outer Great S. Channel	255-258
SS25	E. Gulf of Maine	111-114	SS62	Nantucket Slope	259-262
SS26	Georges Basin	115-118	SS63	Nantucket Offshore	263-266
SS27	Georges Shoal	119-122	SS64	Georges Slope	267-270
SS28	E. Georges Bank	123-126	SS65	Georges Offshore	271-274
SS29	N.E. Channel	127-130	SS66	Cabot Strait West	275-278
SS30	Southern Slope	131-134	SS67	Cabot Strait Central	279-282
SS31	Southern Offshore	135-138	SS68	Cabot Strait East	283-286
SS32	Central Offshore	139-142	WSS	Western Scotian Shelf	287-290
SS33	Central Slope	143-146	CSS	Central Scotian Shelf	291-294
SS34	Northern Slope	147-150	ESS	Eastern Scotian Shelf	295-298
SS35	Northern Offshore	151-154	SS	Scotian Shelf	299-302
SS36	S.E. Georges Bank	155-158	GOM	Gulf of Maine	303-306
SS37	Southern Georges Bank	159-162			

ABSTRACT

Casault, B., A.F. Vézina and B. Petrie. 2003. Atlas of surface mixed layer characteristics for the Scotian Shelf and the Gulf of Maine. Can. Data Rep. Hydrogr. Ocean Sci. 164: v + 306 pp.

The characteristics of the surface mixed layer, namely the depth and the mean temperature, salinity and density (expressed as sigma-t, σ_t), were calculated from temperature and salinity profiles collected over the Scotian Shelf and the Gulf of Maine areas and spanning the years 1900 - 2003. The results are presented for several subregions and include the surface mixed layer characteristics for each individual observed profile, the monthly statistics calculated over the entire time period as well as the spatial and temporal distributions of the observed profiles.

RÉSUMÉ

Casault, B., A.F. Vézina and B. Petrie. 2003. Atlas of surface mixed layer characteristics for the Scotian Shelf and the Gulf of Maine. Can. Data Rep. Hydrogr. Ocean Sci. 164: v + 306 pp.

Les caractéristiques de la couche mélangée de surface, à savoir la profondeur ainsi que les température, salinité et densité (exprimée par sigma-t, σ_t) moyennes ont été calculées à partir de profils de température et de salinité échantillonés sur les régions du plateau Néo-Écossais et du golfe du Maine sur la période 1900 - 2003. Les résultats sont présentés pour différentes sous-régions et incluent les caractéristiques de la couche mélangée de surface pour chacun des profils observés, les statistiques mensuelles calculées sur toute la période couverte ainsi que les distributions spatiale et temporelle des profils observés.

1. Introduction

The surface mixed layer can be defined as the uppermost layer of the water column which exhibits homogeneous or near-homogeneous properties as a result of enhanced mixing due to air-sea interactions. The characteristics of the surface mixed layer, namely its depth, temperature and salinity (and consequently its density) are relevant to the study of many important marine processes such as the biological production cycle, air-sea interaction and acoustic propagation.

In this report, the characteristics of the surface mixed layer (*i.e.* the depth and the mean temperature, salinity and sigma-t) were calculated from temperature and salinity profiles collected over the Scotian Shelf and the Gulf of Maine areas and spanning over 100 years (1900 to 2003). The depth of the mixed layer was calculated for each profile using the technique described in Section 3 and each profile was examined according to the quality control procedures described in Section 4. The characteristics of the surface mixed layer are presented for 68 subregions (*c.f.* Fig. 1) as defined by *Petrie et al.* [1996], and also for composite subregions representing the western Scotian Shelf (WSS), the central Scotian Shelf (CSS), the eastern Scotian Shelf (ESS), the overall Scotian Shelf (SS) and the Gulf of Maine (GOM). Included are the spatial and temporal distributions of the observed profiles (*e.g.* Fig. 4a), the mixed layer characteristics for each individual observed profile (*e.g.* Fig. 4b) and the monthly statistics calculated over the entire period (*e.g.* Fig. 4c and Table 2).

The motivation for this report comes mainly from efforts to model primary production on the Scotian Shelf and to quantify the interannual variability of biological, chemical and physical variables measured as part of the Atlantic Zone Monitoring Program (AZMP). This report also complements the temperature and salinity atlas published by *Petrie et al.* [1996].

2. Data source and retrieval

All the data used in the preparation of this report originated from the Ocean Sciences hydrographic (climate) database maintained at the Bedford Institute of Oceanography (BIO) and available to registered users at: *http://www.mar.dfo-mpo.gc.ca/science/ocean/database/data_query.html*.

Temperature, salinity and sigma-t data were extracted from the database for each one of the 68 subregions shown in Fig. 1 (see *Petrie et al.* [1996] for details) and for the five composite subregions (WSS, CSS, ESS, SS and GOM) described below. Subregions SS1 and SS6 were slightly modified from their original definitions in order to exclude profiles sampled in Sydney Harbour and Whitehead Harbour, respectively.

The boundaries of the composite subregions were defined in such a way that they excluded both coastal inlets and shelf break/slope locations. The boundaries for each composite subregion were defined as follows:

WSS : subregion bounded to the east by the 64°W longitude, to the west by the 66°W longitude, to the north by the coast (as delimited by the northernmost boundaries of SS14, SS20 and SS24) and to the south by the 200 m isobath (as delimited by the southernmost boundaries of SS17, SS18, SS22 and SS29, and by the easternmost boundary of SS28).

CSS : subregion bounded to the east by the 62°W longitude, to the west by the 64°W longitude, to the north by the coast (as delimited by the northernmost boundaries of SS13 and SS14) and to the south by the 200 m isobath (as delimited by the southernmost boundaries of SS10, SS11, SS16 and SS17).

ESS : subregion bounded to the east by the 58°W longitude, to the west by the 61°W longitude, to the north by the coast and by the 200 m isobath (as delimited by the easternmost boundary of SS5 and by the northernmost and

easternmost boundaries of SS6) and to the south by the 200 m isobath (as delimited by the southernmost boundaries of SS4, SS8 and SS9).

SS : amalgamation of subregions 4 through 23 (*c.f.* Fig. 1), inclusively.

GOM : amalgamation of subregions 26 and 41 through 47 (*c.f.* Fig. 1), inclusively.

The composite subregions WSS, CSS and ESS were included in order to contrast the different physical regimes encountered on the Scotian Shelf. These regimes range from a strong tidal influence in WSS, to a more typical shelf system in CSS, to a strong horizontal advection influence in ESS. The composite subregion SS is consistent with the definition used by *Drinkwater et al.* [2002] to describe the hydrographic variability on the Scotian Shelf. Finally, the composite subregion GOM is representative of the central Gulf of Maine as its definition excludes areas subject to the strong tidal influence of the Bay of Fundy and areas subject to the along-coast mean current. The subregion GOM is therefore comparable, to some extent, to subregion CSS on the basis of their bathymetry (presence of deep basins) and their hydrography (access to slope water).

The data were extracted over the time span of the database at the time of this report, *i.e.* from January 1, 1900 to March 18, 2003. Moreover, only records with both temperature and salinity were extracted from the database since the calculation of the depth of the mixed layer was based on a density gradient criterion.

Preliminary processing of the data consisted in bin averaging, which was performed through the database query module application. Bin averaging was used to reduce instrumental noise inherent in CTD data, particularly from the period when modern digital instruments were not available. The depth structure used for bin averaging is shown in Table 1.

Table 1. Depth structure used for bin averaging of profile data.

Depth range	Depth increment	Bin range
0 to 200 m	5 m	± 2.5 m
200 to 300 m	10 m	± 5 m
300 to 500 m	20 m	± 10 m

3. Data processing

Upon extraction from the database, initial filtering of the data was performed in order to retain for further analysis only profiles with a minimum of three observations. The resulting profiles were later subjected to additional quality control based essentially on the location of the observations within a given profile as discussed in section 4.

For the purpose of this work, the surface mixed layer was defined as the layer comprised between the surface and the pycnocline. The depth of the mixed layer was therefore determined as the first significant inflection point encountered along the density profile, which coincides with the top of the pycnocline (*c.f.* Fig. 2).

The algorithm used to calculate the surface mixed layer characteristics (*i.e.* the depth and the mean temperature, salinity and sigma-t) consisted in the following three steps:

i. For each profile, the density gradient ($d\rho/dz$, in kg/m^4) was calculated at the midpoint between two successive (i, $i+1$) observations as follows:

$$\left.\frac{d\rho}{dz}\right|_i = \frac{\sigma_{t,i+1} - \sigma_{t,i}}{p_{i+1} - p_i}$$

where σ_t is the density (expressed as sigma-t, in kg/m^3) and p is the actual pressure (in dbar) of the observations, which is transformed to depth units using the conversion : 1 dbar = 1 m of water.

ii. The depth of the mixed layer (Z_{ml}) was then estimated as the point where the density gradient was equal to or larger than 0.01 kg/m^4. This criterion was established after examining a time series of profiles from the central Scotian Shelf.

iii. The mean temperature (T_{ml}), salinity (S_{ml}) and sigma-t ($Sigt_{ml}$) of the mixed layer were calculated by vertical integration between the first observation and the estimated mixed layer depth.

Fig. 2 shows an example of the results obtained from the above algorithm using observed profile data. In this example, the depth of the mixed layer is estimated as $Z_{ml} = 43$ m, corresponding to the first point ($i_{ml} = 6$) on the density gradient profile where $d\rho/dz \geq 0.01$ kg/m^4. As shown on the right panel of Fig. 2, this point falls halfway between two successive sigma-t observations and is considered to be the delimitation between the surface mixed layer and the pycnocline. This delimitation could, in reality, occur anywhere between these two observations. The use of the midpoint is justified on the fact that this technique is based on the available observations only. The final calculation consists in the mean temperature ($T_{ml} = 0.2$°C), salinity ($S_{ml} = 30.9$ psu) and sigma-t ($Sigt_{ml} = 24.7$ kg/m^3) of the mixed layer as obtained by integration between the first observation ($i = 1$) and the estimated mixed layer depth ($i = i_{ml} = 6$).

This technique, albeit simple, proved to be very effective in estimating the depth of the mixed layer. Alternate algorithms were tested, but none proved to be superior than using the observations alone in determining the mixed layer depth. This technique was also reliable upon working with relatively fine resolution (~ 5 m or less) profiles. However, special care had to be taken when working with coarser resolution profiles as the confidence in the mixed layer depth estimate degenerates as the profile resolution decreases. For example, a profile sampled with a resolution of 5 m and showing a first inflection point between 60 and 65 m would result in a mixed layer depth estimate of 62.5 m ± 2.5 m (or ±4%). A similar profile sampled at 50 and 75 m in the region of

interest, all other sigma-t values being the same, would result in a mixed layer depth estimate of 62.5 m ± 12.5 m (or ±20%).

4. Quality control

The goal of the quality control procedure was to retain the largest number of profiles for analysis without compromising the confidence in the mixed layer depth estimates. This was particularly relevant with the pre-CTD profiles, which have a rather coarse resolution but can still provide valuable information.

The quality control procedure thus consisted in assessing each profile with respect to two criteria. The first criterion (#1) was that the resolution of the two successive observations used to calculate the mixed layer depth must be within a threshold value specified at a given depth level (see below). The second criterion (#2) was that the number of observations between the surface and the estimated mixed layer depth must be sufficient to exclude the possibility of missing any significant inflection points.

The limits set for the above criteria were based on the profile sampling pattern traditionally used prior to CTD measurements, which typically consisted in the following standard depth levels: 0, 10, 20, 30, 50, 75, 100, 150, 200 and 250 m. These limits allowed keeping the older profiles for analysis, but only if these profiles met the two criteria mentioned above.

The details of the quality control procedure are shown in the form of pseudocodes in Fig. 3. In Fig. 3a, each profile is assessed against quality control criterion #1 by checking if the resolution of the observations used to calculate Z_{ml} is within the threshold value at that depth level. For example, a profile sampled at 0, 10, 20, 30, 40 and 80 m with a mixed layer depth estimate of 60 m would be rejected because the spacing of the two successive observations used to calculate Z_{ml} exceeds the typical resolution of 25 m at that depth level.

In Fig. 3b, each profile that passed criterion #1 is assessed against quality control criterion #2, *i.e.* the sufficiency of the observations between the surface and the estimated mixed layer depth. Profiles for which sampling starts below the surface are only retained if the first observation is within a certain depth threshold value and if the spacing between the first observation and the observations used to calculate Z_{ml} is at least ¼ of the resolution at that depth level. For example, a summer profile sampled at 20, 30, 50 and 75 m with an estimated mixed layer depth of 25 m would be rejected because of insufficient near surface observations. As noted in Fig. 3b, profiles are assessed differently whether they are sampled in winter, spring, summer or fall. For the purpose of this work, these periods were defined, respectively, as: December 01 to April 30, May 01 to June 30, July 01 to September 30 and October 01 to November 30.

In addition to the above quality control procedure, profiles that lead to outliers (*e.g.* due to bad data; data indicative of specific events such as upwelling; data sampled nearby freshwater discharge) were manually excluded from final analysis where necessary.

5. Results

The surface mixed layer characteristics calculated for the 68 subregions (SS1 to SS68) and the five composite subregions (WSS, CSS, ESS, SS and GOM) are presented in Figs. 4 to 76 and Tables 2 to 74. For each subregion, the first figure (*e.g.* Fig. 4a) shows the spatial and the temporal (by year and by month) distributions of the profiles retained for the analysis. The second figure (*e.g.* Fig. 4b) shows the mixed layer characteristics calculated for each individual observed profile. Finally, the third figure (*e.g.* Fig. 4c) and the table (*e.g.* Table 2) show the monthly statistics calculated over the entire time period of the analysis.

Each table also includes the mean seabed depth for a given subregion and the mean sounding depth of the observed profiles in that subregion. These statistics were

calculated using the *Smith and Sandwell* 2 min global topography data set available at *http://ferret.pmel.noaa.gov/NVODS/servlets/dataset*. The mean seabed depth was calculated by averaging all elevation data points falling within the boundaries of a given subregion. For the mean sounding depth, bilinear interpolation was used to calculate the sounding depth for each observed profile, prior to averaging for all valid profiles in a given subregion.

The monthly statistics of the mixed layer characteristics were calculated using the entire set of data (*i.e.* all years combined) available for a given month and for a given subregion. Therefore, no attempt was made to remove any bias associated with years having a higher occurrence of sampling. Moreover, the standard deviation was calculated only for months with at least five observations, which otherwise shows as *NaN*'s in the tables.

The results show that for most subregions, the annual cycle of the mixed layer depth (Z_{ml}) follows a general pattern, which can be described as follows. The mixed layer is deepest during the winter, followed by the shallowing of the mixed layer during the spring prior to reaching minimum depths during the summer (July-August) and finally followed by a gradual return to deeper mixed layers during the fall. Typically, the mixed layer depth is between 20 and 60 m during the winter (with occurrences reaching below 100 m), between 5 and 15 m during the summer and between 20 and 40 m during the fall. However, departure from this general pattern can be noticed, especially for shallow subregions (*e.g.* SS24, SS27, SS38, SS39, SS49, SS57 and SS58) which exhibit an annual cycle with very low amplitude.

Of significant importance is the variance of the mixed layer depth (Z_{ml}), which, for most subregions, shows to be larger during the winter than during the summer and the fall. Larger winter variances reflect to a certain extent excursions of the mixed layer resulting from the combined effects of storms and the weak stability conditions of the water column under surface cooling conditions. Such excursions of the mixed layer do not

prevail during the summer and the fall as the energy from storms must first overcome the stable stratified structure of the water column.

The annual cycle of the mixed layer temperature (T_{ml}) also follows a well-defined pattern characterized by minimum temperatures during the winter (March) when the mixed layer is deepest and maximum temperatures during the summer (August) when the water column is stratified. Moreover, both the winter minimum and the summer maximum temperatures show important spatial variability. On one hand, the winter surface water is coolest in the eastern subregions of the Scotian Shelf, with a small gradual increase toward the western Scotian Shelf and the Gulf of Maine subregions. On the other hand, the summer surface water is coolest in the subregions of the Bay of Fundy and along the southwestern coast of Nova Scotia where tidal mixing appears to work against stratification of the water column. The shelf break/slope subregions exhibit both the warmest winter and summer surface water due to the presence of horizontal eddies resulting in mixing of shelf water with warmer water from the Gulf stream.

The annual cycle of the mixed layer salinity (S_{ml}) indicates that the surface salinity remains relatively uniform throughout the year for most subregions, except as noted below. One exception is the coastal subregions of the Gulf of Maine, which show a surface salinity minimum during the spring as a result of freshwater input from river discharge. A second exception is the eastern subregions of the Scotian Shelf, which show a surface salinity minimum during the summer (August) as a result of fresher water input from the Gulf of St. Lawrence. The simultaneous effects of larger summer heating heating and freshening of the surface layer can be seen by a slightly larger amplitude in the annual cycle of the mixed layer sigma-t ($Sigt_{ml}$) for ESS and CSS compared to WSS (*i.e.* Figs. 74c and 73c *vs.* Fig. 72c). The largest mixed layer salinity values are observed in the shelf break/slope subregions due again to the horizontal mixing of shelf water with saltier water from the Gulf Stream.

6. Acknowledgements

This work was supported by the Science Strategic Fund of the Department of Fisheries and Oceans, #21776 and #21777. We thank K.F. Drinkwater and D. Gregory for their review of this report.

7. References

Drinkwater, K.F., B. Petrie and P.C. Smith. 2002. Hydrographic variability on the Scotian Shelf during the 1990s. NAFO SCR Doc. 02/42. Serial No. N4653. 16 pp.

Petrie, B., K. Drinkwater, D. Gregory, R. Pettipas and A. Sandström. 1996. Temperature and salinity atlas for the Scotian Shelf and the Gulf of Maine. Can. Tech. Rep. Hydrogr. Ocean Sci. 171: v + 398 pp.

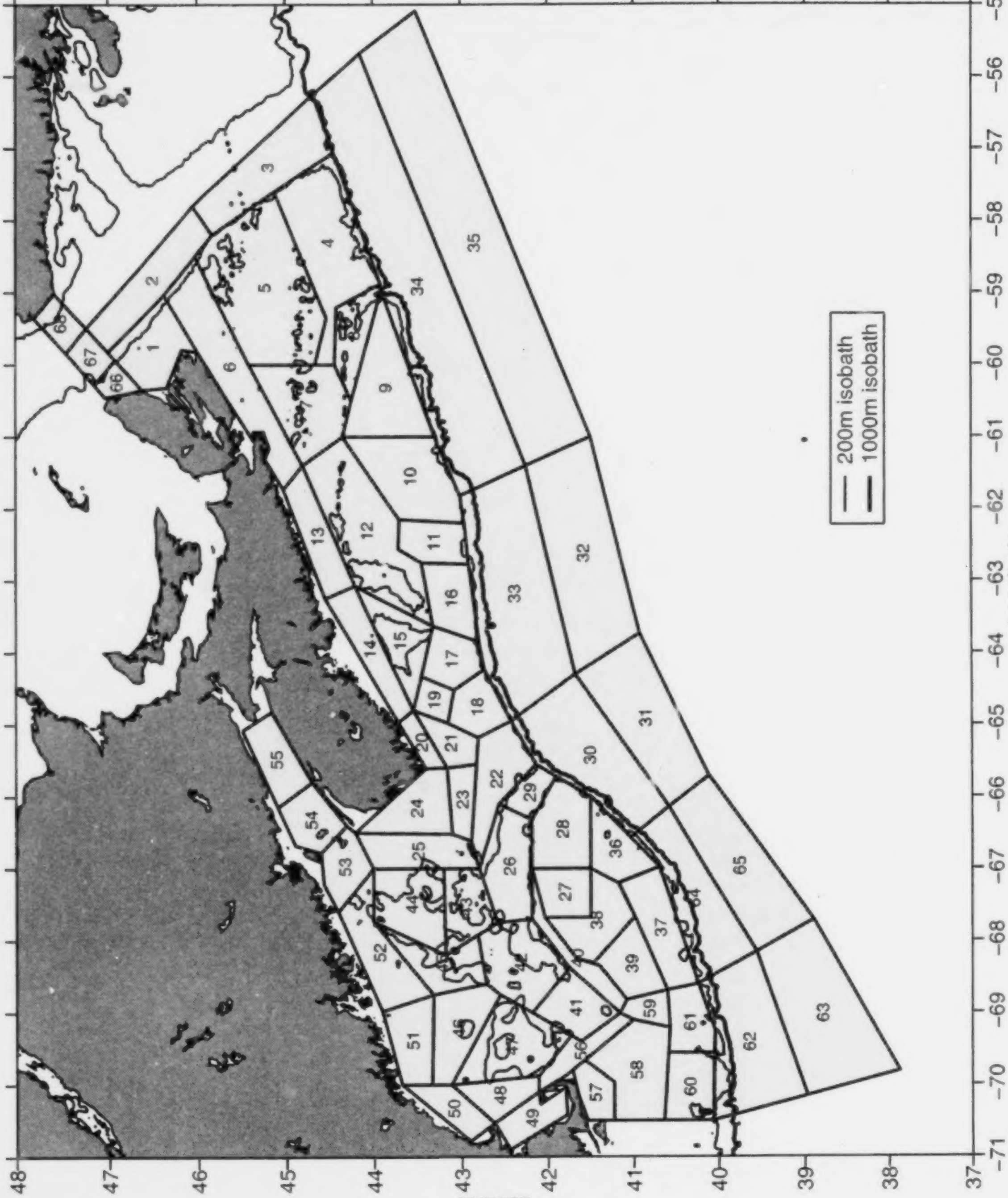

Figure 1. Scotian Shelf and Gulf of Maine climatological subregions (from *Petrie et al.* [1996]).

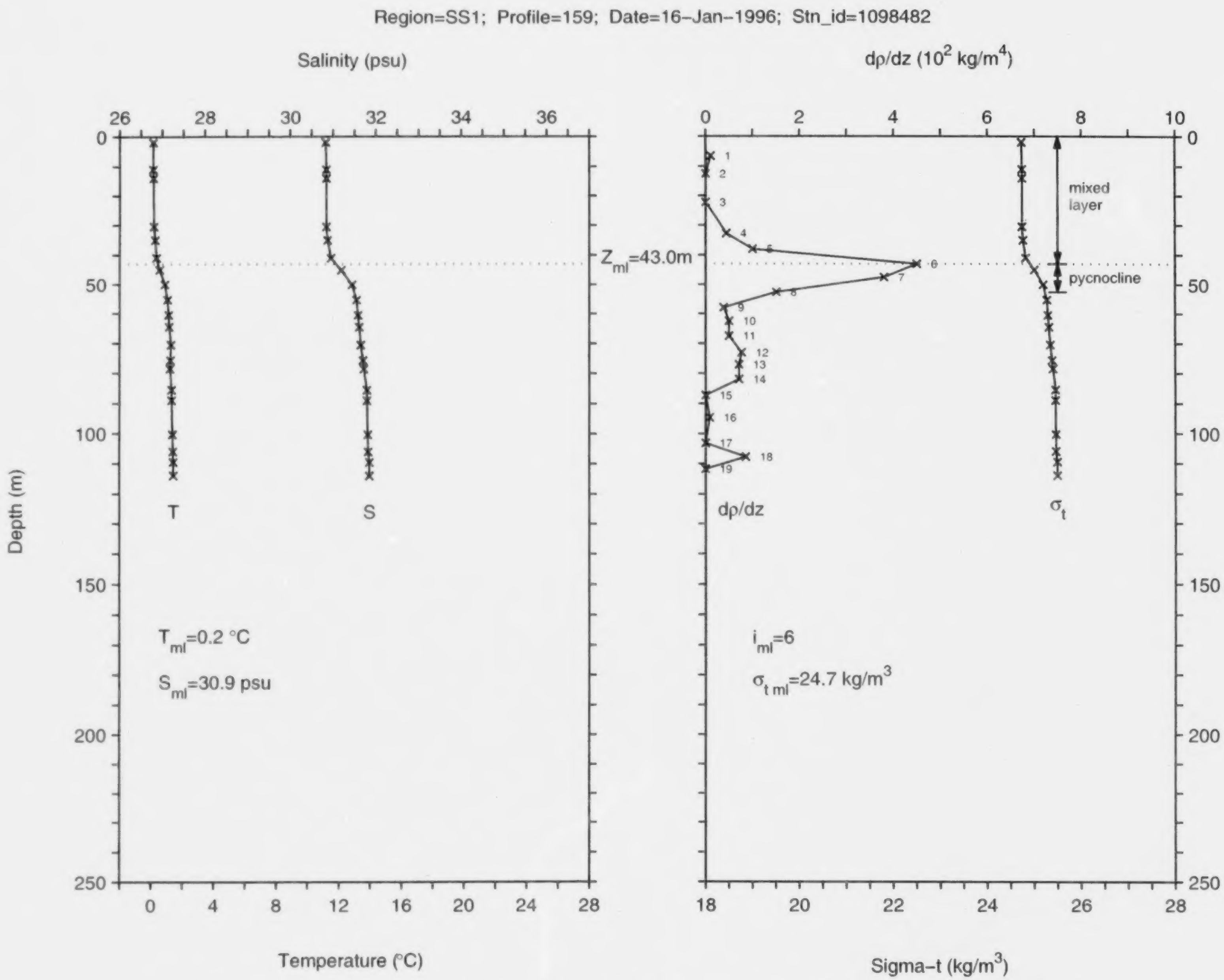

Figure 2. Mixed layer characteristics calculated from observed profile data : an example.

Pseudocode #1

```
i_ml = minimum ( find ( dρ/dz ≥ 0.01 ) )
if ( i_ml = [ ] )
    reject profile : density gradient not met
else
    Z_ml =0.5·( p_{i_ml} + p_{i_ml+1} ) ;        ΔZ = Z_{i_ml+1} - Z_{i_ml}

    if ( Z_ml > 250m )
        reject profile : mixed layer depth beyond acceptable range

    elseif ( Z_ml > 100m )
        if ( ΔZ > 50m )
            reject profile : observations too sparse
        else
            assess profile (call pseudocode #2)
        end

    elseif ( Z_ml > 50m )
        if ( ΔZ > 25m )
            reject profile : observations too sparse
        else
            assess profile (call pseudocode #2)
        end

    elseif ( Z_ml > 30m )
        if ( ΔZ > 20m )
            reject profile : observations too sparse
        else
            assess profile (call pseudocode #2)
        end

    elseif ( Z_ml > 0m )
        if ( ΔZ > 10m )
            reject profile : observations too sparse
        else
            assess profile (call pseudocode #2)
        end

    else
        reject profile : error  ( Z_ml must be > 0 )
    end
end
```

Figure 3a. Pseudocode for the quality control procedure (criterion #1).

Pseudocode #2

```
if ( winter profile )
   if ( Z1 ≥ 100m )
      reject profile : insufficient surface observations
   elseif ( Z1 ≥ 50m )
      if ( Z1_ml – Z1 < 6.25m )
         reject profile : observations too close
      else
         accept profile
      end
   elseif ( Z1 ≥ 30m )
      if ( Z1_ml – Z1 < 5m )
         reject profile : observations too close
      else
         accept profile
      end
   elseif ( Z1 ≥ 20m )
      if ( Z1_ml – Z1 < 2.5m )
         reject profile : observations too close
      else
         accept profile
      end
   else
      accept profile
   end

               continue on right panel

note : Z1 = first profile observation from sea surface
```

```
elseif ( spring/fall profile )
   if ( Z1 ≥ 50m )
      reject profile : insufficient surface observations
   elseif ( Z1 ≥ 30m )
      if ( Z1_ml – Z1 < 5m )
         reject profile : observations too close
      else
         accept profile
      end
   elseif ( Z1 ≥ 10m )
      if ( Z1_ml – Z1 < 2.5m )
         reject profile : observations too close
      else
         accept profile
      end
   else
      accept profile
   end
elseif ( summer profile )
   if ( Z1 ≥ 30m )
      reject profile : insufficient surface observations
   elseif ( Z1 ≥ 10m )
      if ( Z1_ml – Z1 < 2.5m )
         reject profile : observations too close
      else
         accept profile
      end
   else
      accept profile
   end
end
```

Figure 3b. Pseudocode for the quality control procedure (criterion #2).

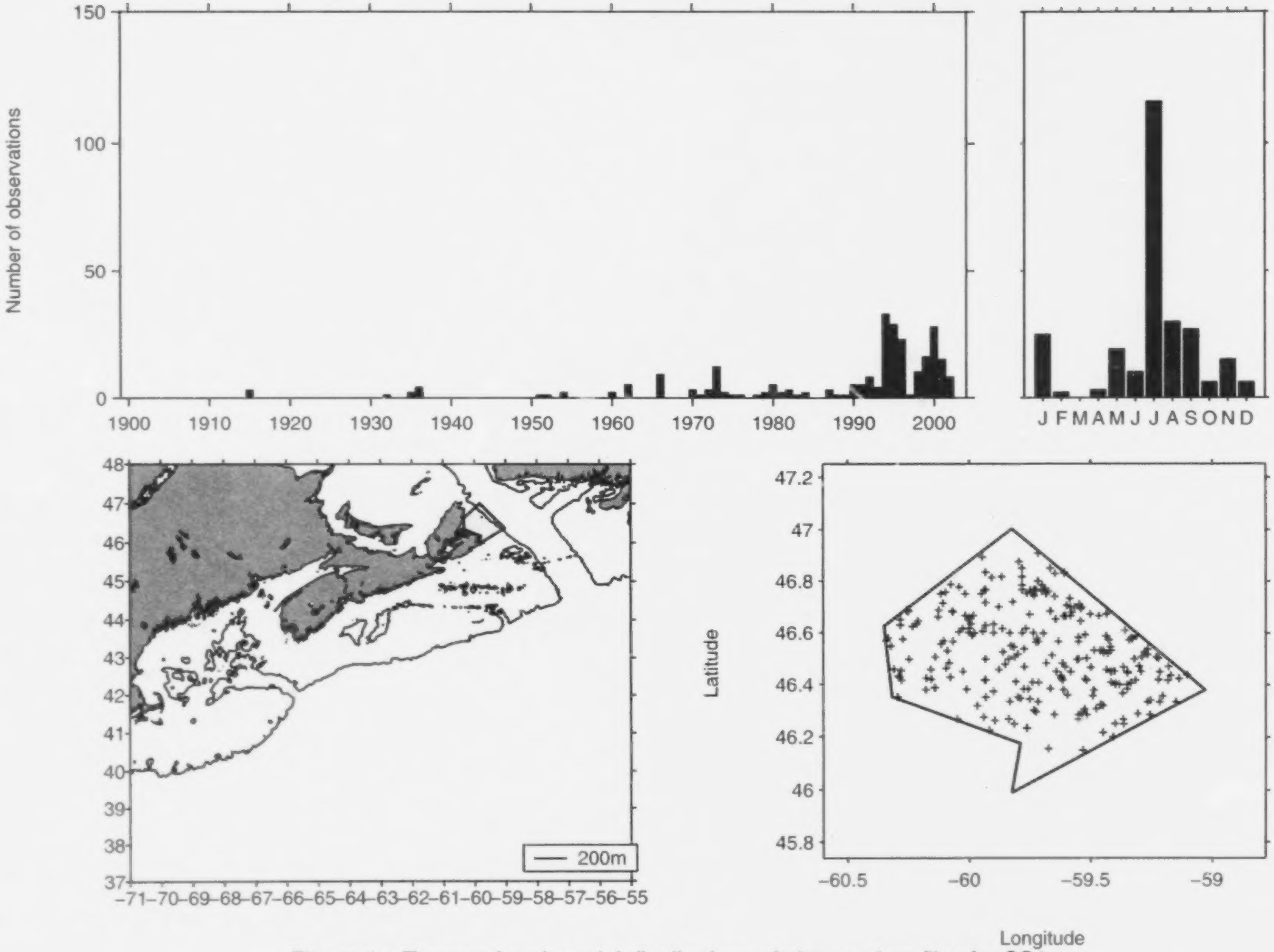

Figure 4a. Temporal and spatial distributions of observed profiles for SS1.

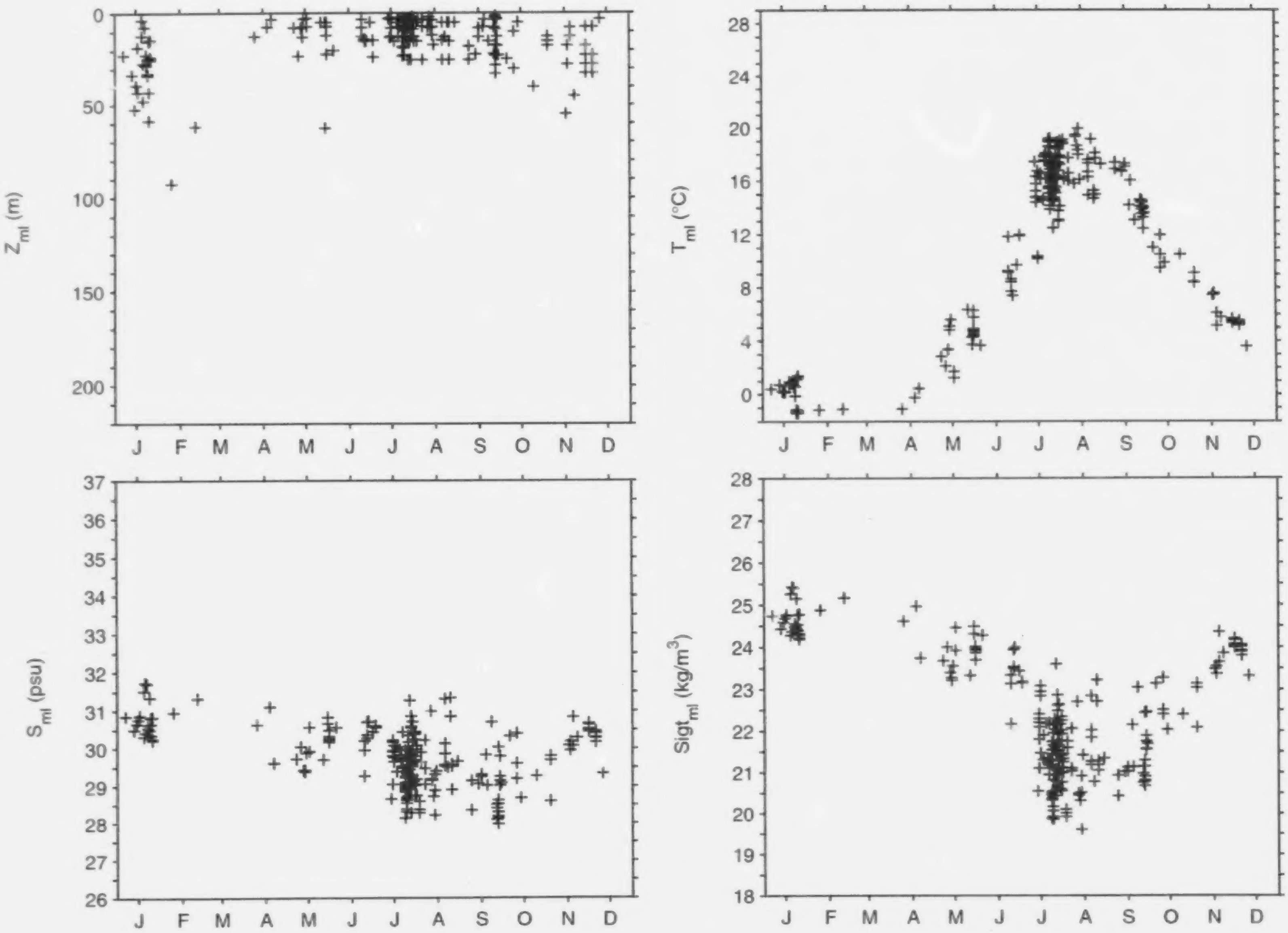

Figure 4b. Calculated mixed layer characteristics for SS1.

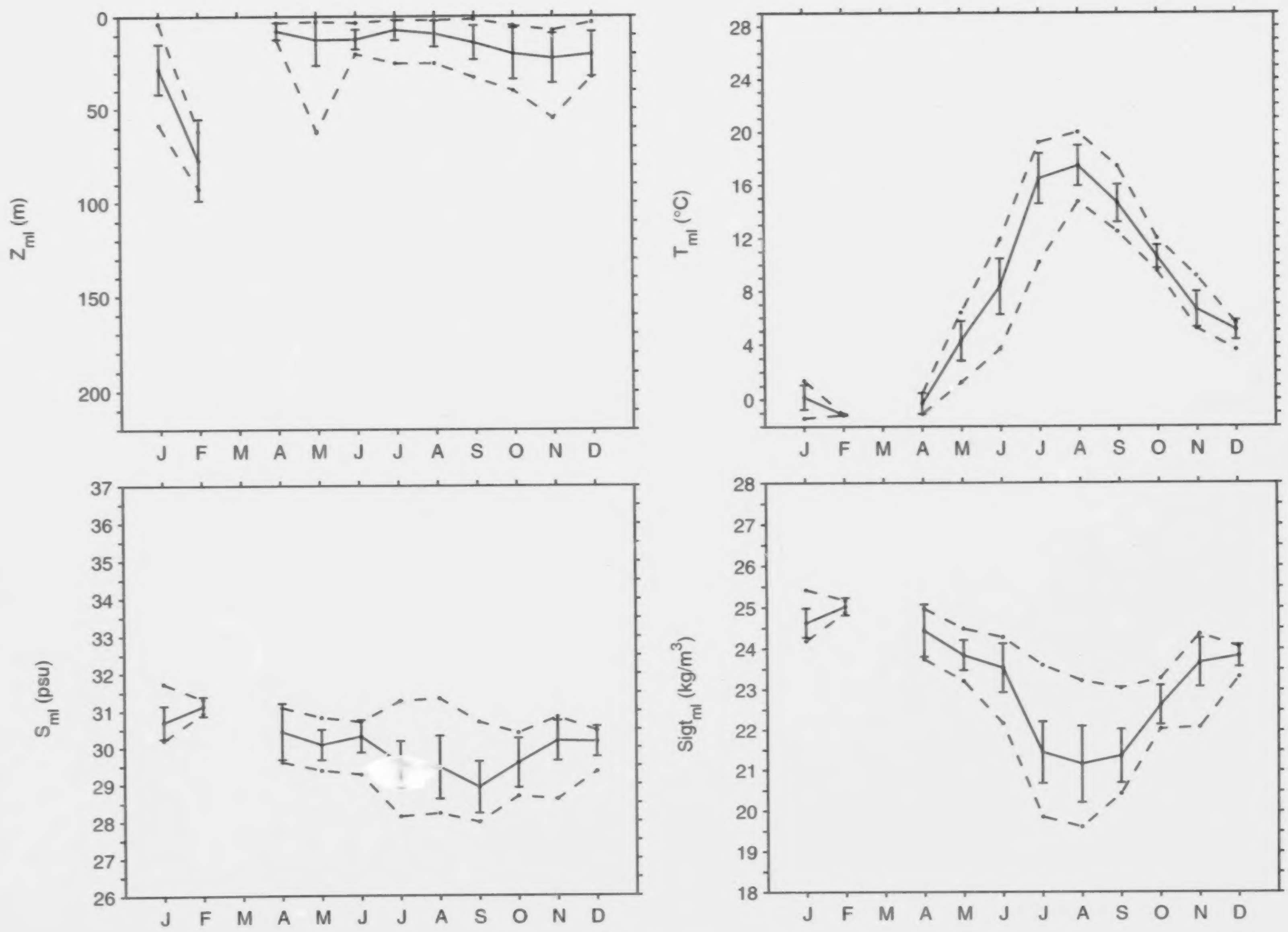

Figure 4c. Monthly statistics of mixed layer characteristics for SS1 (– : mean±sd; -- : min,max).

Table 2. Monthly statistics of mixed layer characteristics for SS1.

Profiles extracted (#) : 306   Profiles retained (#) : 259   Profiles rejected (%) : 15.4
Mean seabed depth (m) for subregion : 125.5   Mean sounding depth (m) for profiles : 129.4

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	25	2	0	3	19	10	116	30	27	6	15	6
Mixed layer depth : Z_ml (m)												
mean	28.14	77.10	NaN	7.83	12.50	12.22	7.29	9.25	13.97	19.93	22.36	20.13
median	25.00	77.10	NaN	7.50	7.50	14.25	5.00	5.00	12.80	17.27	17.50	25.00
min	3.85	61.70	NaN	3.50	2.85	3.50	2.00	2.15	1.60	5.00	7.50	3.30
max	58.50	92.50	NaN	12.50	62.50	20.00	25.00	25.00	32.65	40.00	55.00	32.50
s.d.	13.51	NaN	NaN	NaN	13.63	5.17	5.32	6.79	9.06	13.75	13.40	11.92
Mixed layer temperature : T_ml (deg.C)												
mean	0.18	-1.13	NaN	-0.29	4.27	8.33	16.47	17.45	14.59	10.57	6.60	5.05
median	0.59	-1.13	NaN	-0.25	4.67	8.55	17.02	17.66	14.40	10.51	5.78	5.29
min	-1.39	-1.16	NaN	-1.08	1.25	3.67	10.17	14.70	12.46	9.50	5.16	3.61
max	1.39	-1.10	NaN	0.44	6.35	11.85	19.22	19.96	17.42	11.97	9.13	5.54
s.d.	0.91	NaN	NaN	NaN	1.45	2.10	1.92	1.53	1.41	0.87	1.35	0.72
Mixed layer salinity : S_ml (psu)												
mean	30.70	31.14	NaN	30.45	30.09	30.32	29.56	29.47	28.92	29.58	30.19	30.16
median	30.63	31.14	NaN	30.63	30.19	30.40	29.57	29.49	29.02	29.44	30.29	30.29
min	30.21	30.95	NaN	29.61	29.38	29.27	28.14	28.22	27.98	28.68	28.60	[illegible]
max	31.73	31.32	NaN	31.10	30.83	30.71	31.27	31.34	30.70	30.40	30.83	30.47
s.d.	0.44	NaN	NaN	NaN	0.42	0.44	0.62	0.86	0.70	0.68	0.55	0.42
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	24.63	25.02	NaN	24.44	23.84	23.53	21.45	21.16	21.37	22.63	23.67	23.83
median	24.54	25.02	NaN	24.62	23.93	23.52	21.34	21.15	21.14	22.46	23.86	23.91
min	24.18	24.88	NaN	23.74	23.21	22.17	19.86	19.61	20.44	22.04	22.09	23.32
max	25.42	25.17	NaN	24.97	24.49	24.28	23.60	23.22	23.05	23.28	24.36	24.06
s.d.	0.36	NaN	NaN	NaN	0.37	0.60	0.76	0.95	0.67	0.48	0.59	0.27

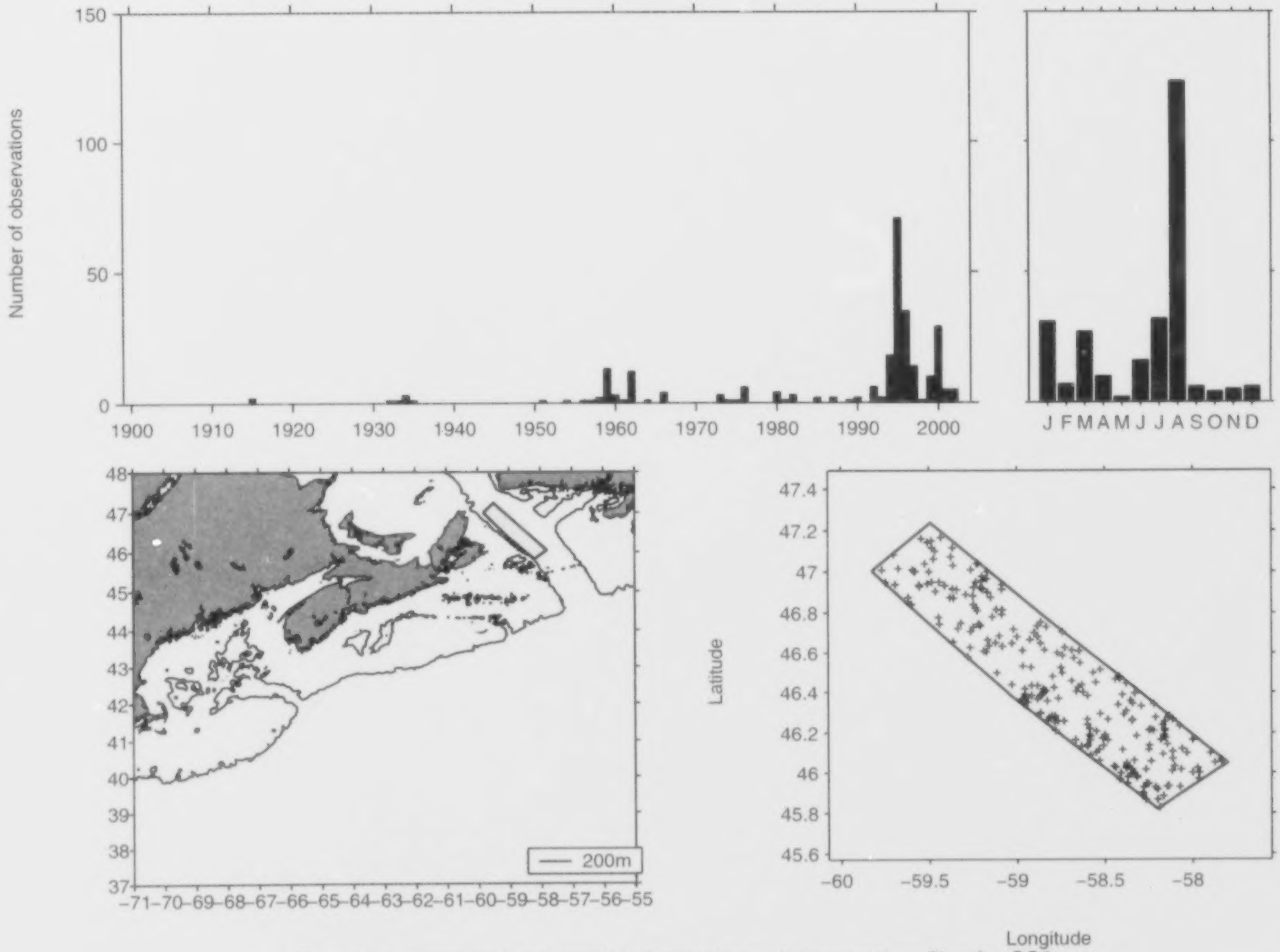

Figure 5a. Temporal and spatial distributions of observed profiles for SS2.

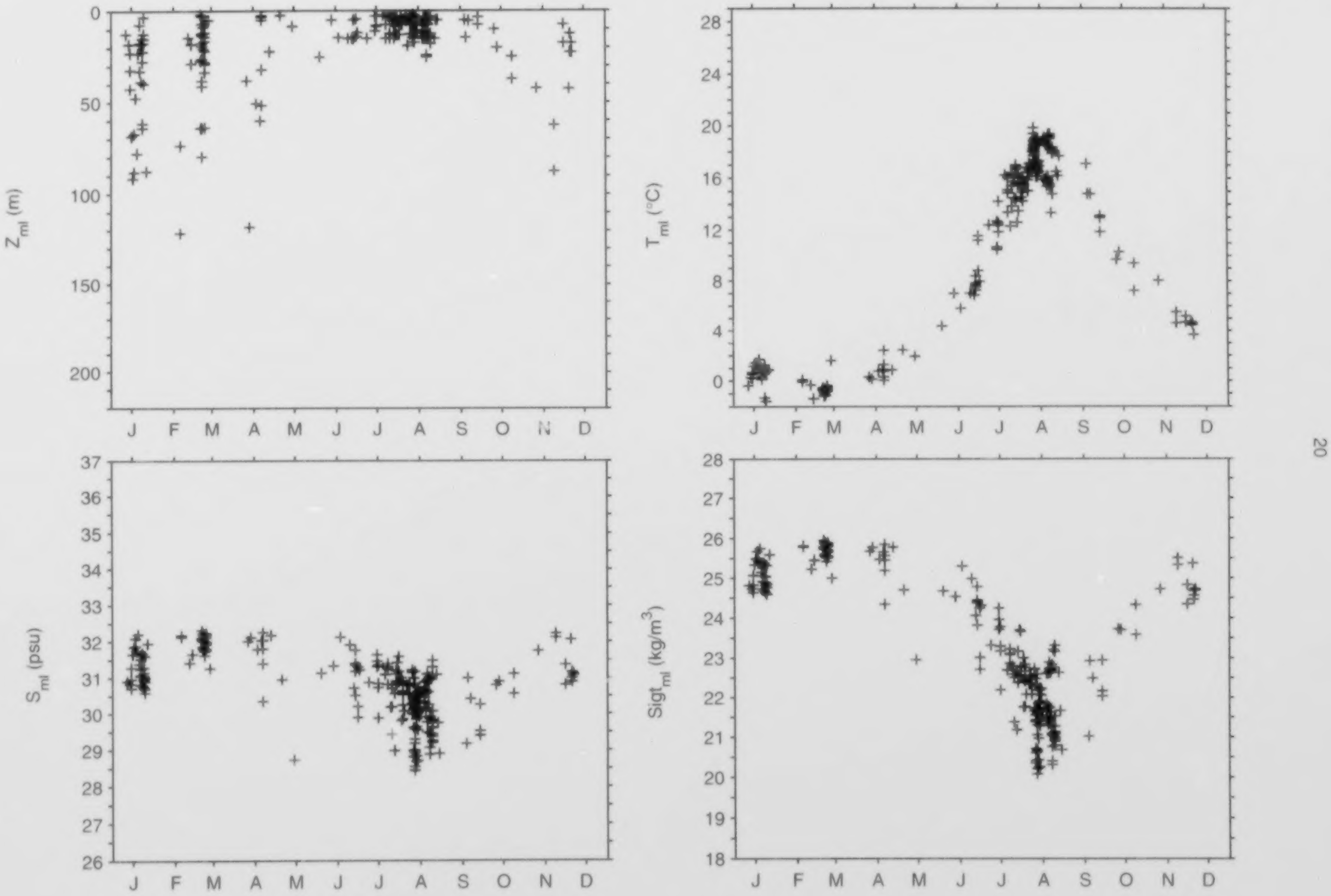

Figure 5b. Calculated mixed layer characteristics for SS2.

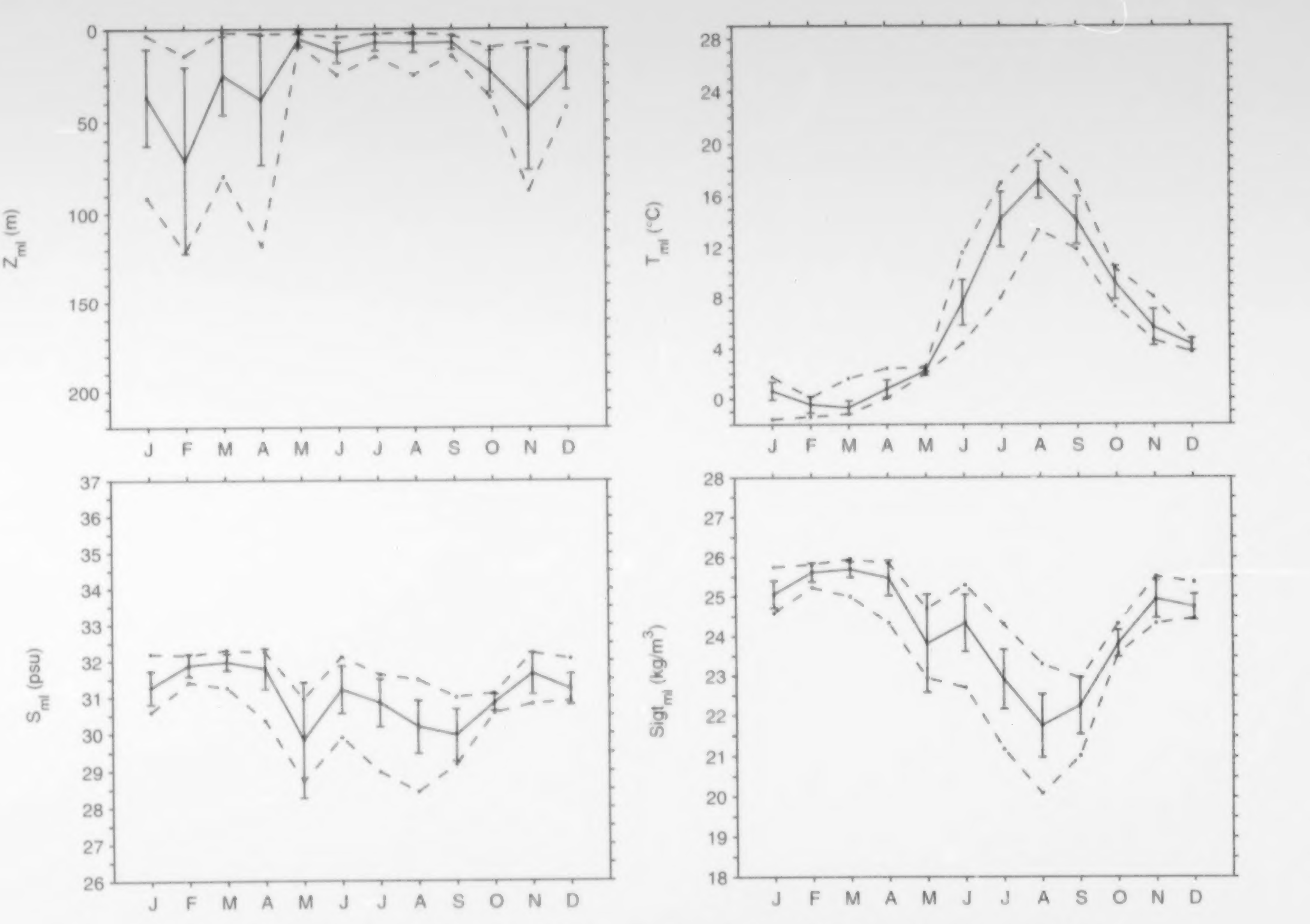

Figure 5c. Monthly statistics of mixed layer characteristics for SS2 (– : mean±sd; -- : min,max).

Table 3. Monthly statistics of mixed layer characteristics for SS2.

Profiles extracted (#) : 307 Profiles retained (#) : 269 Profiles rejected (%) : 12.4
Mean seabed depth (m) for subregion : 409.2 Mean sounding depth (m) for profiles : 400.4

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	31	7	27	10	2	16	32	123	6	4	5	6
Mixed layer depth : Z_ml (m)												
mean	36.74	71.29	24.97	38.26	5.50	12.94	7.46	7.83	7.25	22.96	43.46	21.70
median	27.40	73.60	18.95	34.80	5.50	15.00	7.50	7.05	6.50	22.43	42.30	20.05
min	3.40	14.45	1.90	2.60	2.50	4.50	2.50	2.10	3.50	10.00	7.50	12.50
max	91.50	121.50	79.50	118.00	8.50	25.00	15.00	25.00	14.50	37.00	87.50	42.50
s.d.	26.04	50.78	21.14	35.05	NaN	5.50	4.49	4.90	3.87	NaN	32.67	11.14
Mixed layer temperature : T_ml (deg.C)												
mean	0.63	-0.46	-0.68	0.78	2.20	7.60	14.17	17.26	14.11	9.15	5.61	4.30
median	0.74	-0.07	-0.69	0.77	2.20	7.38	14.67	17.23	13.96	9.55	5.18	4.52
min	-1.59	-1.40	-1.19	0.05	1.95	4.38	7.95	13.35	11.86	7.21	4.62	3.67
max	1.71	0.09	1.61	2.42	2.45	11.55	17.00	19.84	17.10	10.30	8.04	4.74
s.d.	0.71	0.64	0.52	0.70	NaN	1.81	2.14	1.41	1.86	NaN	1.40	0.48
Mixed layer salinity : S_ml (psu)												
mean	31.26	31.89	31.98	31.79	29.84	31.21	30.85	30.19	29.96	30.84	31.65	31.22
median	31.14	32.13	32.02	32.02	29.84	31.31	31.00	30.29	29.90	30.85	31.75	31.09
min	30.59	31.41	31.26	30.35	28.73	29.90	28.98	28.43	29.17	30.56	30.81	30.89
max	32.20	32.17	32.31	32.26	30.95	32.12	31.64	31.49	30.99	31.11	32.22	32.06
s.d.	0.45	0.31	0.23	0.56	NaN	0.66	0.66	0.72	0.71	NaN	0.58	0.43
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.06	25.62	25.69	25.48	23.82	24.34	22.92	21.76	22.26	23.83	24.95	24.75
median	25.04	25.79	25.74	25.62	23.82	24.41	22.97	21.72	22.33	23.71	24.83	24.69
min	24.59	25.23	25.00	24.34	22.95	22.71	21.18	20.08	21.02	23.58	24.34	24.46
max	25.75	25.82	25.95	25.85	24.70	25.30	24.31	23.31	22.94	24.33	25.51	25.37
s.d.	0.34	0.24	0.20	0.44	NaN	0.71	0.75	0.78	0.71	NaN	0.47	0.32

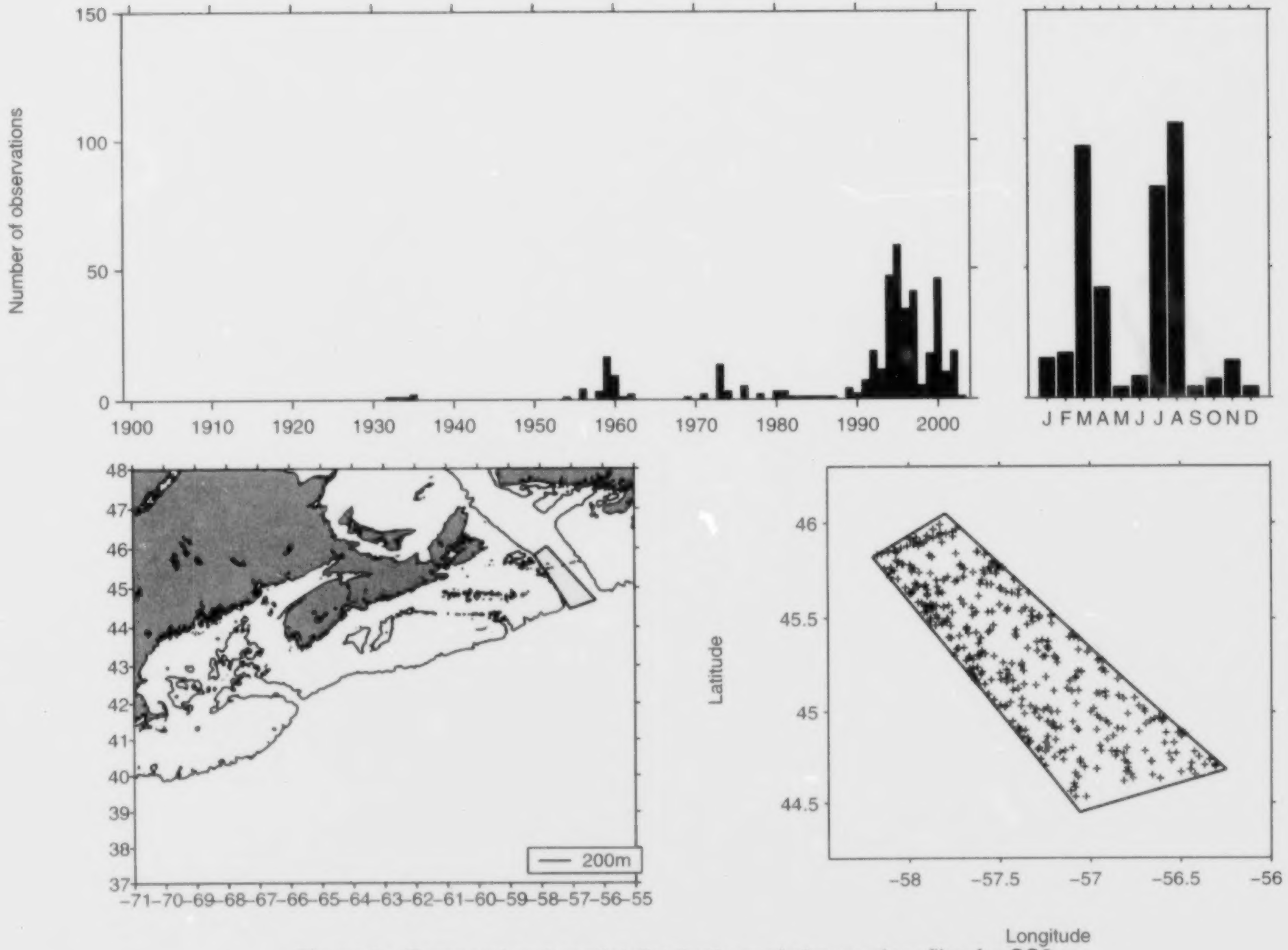

Figure 6a. Temporal and spatial distributions of observed profiles for SS3.

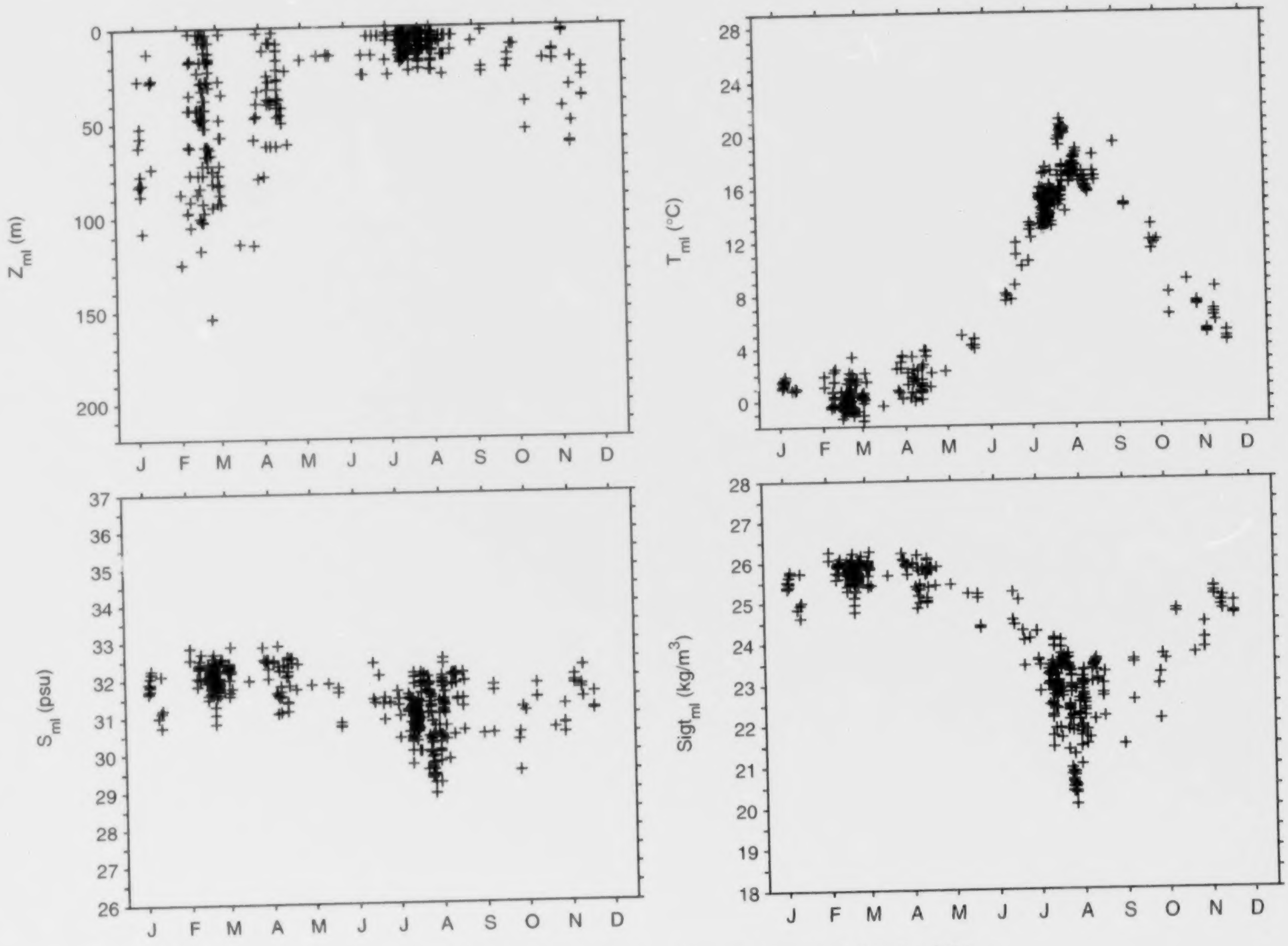

Figure 6b. Calculated mixed layer characteristics for SS3.

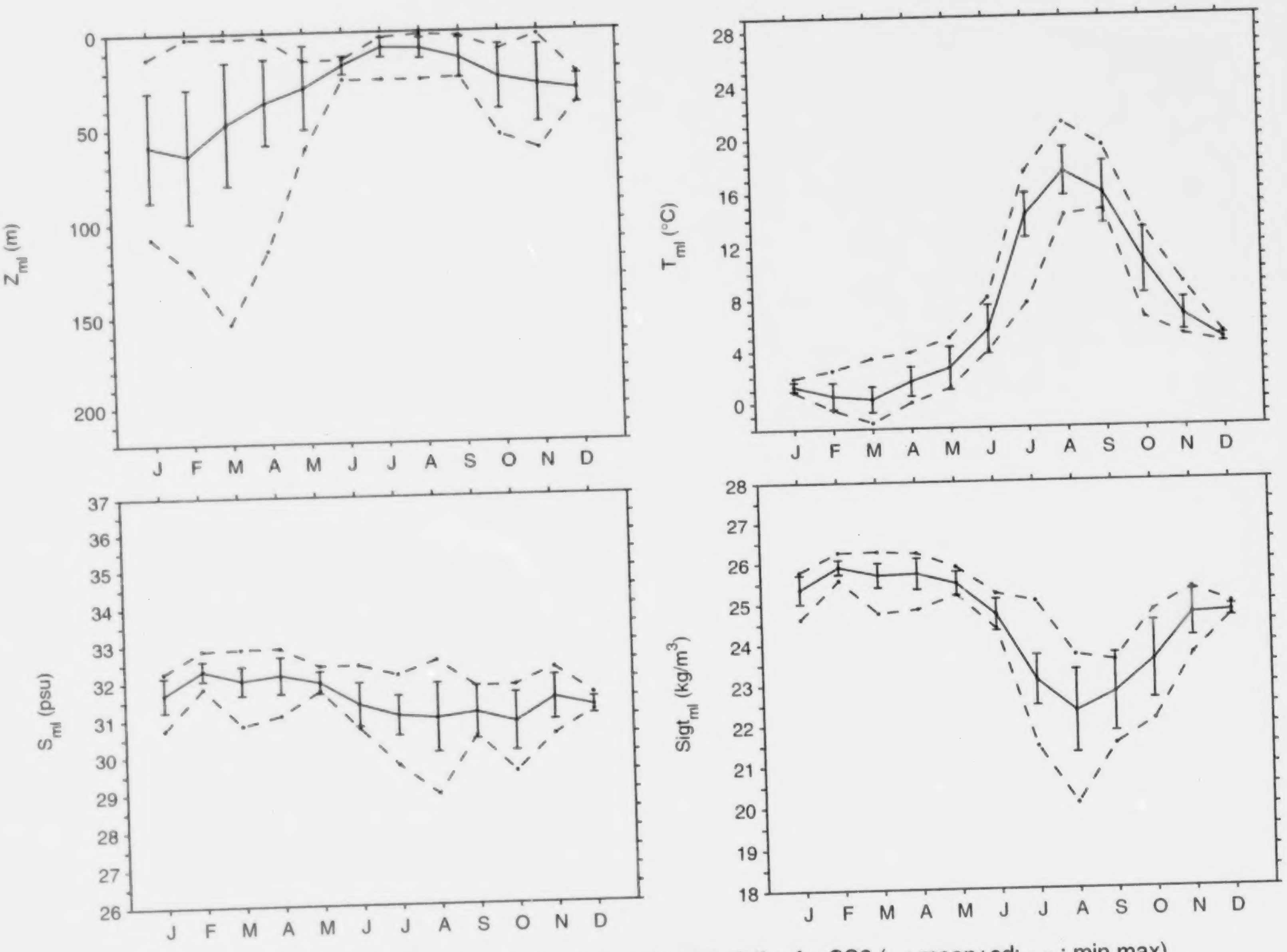

Figure 6c. Monthly statistics of mixed layer characteristics for SS3 (– : mean±sd; –– : min,max).

Table 4. Monthly statistics of mixed layer characteristics for SS3.

Profiles extracted (#) : 447 Profiles retained (#) : 399 Profiles rejected (%) : 10.7
Mean seabed depth (m) for subregion : 423.7 Mean sounding depth (m) for profiles : 405.0

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	15	17	97	42	4	8	81	106	4	7	14	4
Mixed layer depth : Z_ml (m)												
mean	59.31	64.37	47.74	36.48	29.01	17.44	8.19	8.81	14.06	24.36	28.24	30.98
median	62.40	62.90	43.00	37.17	19.75	15.00	7.50	7.47	14.88	18.50	17.95	31.88
min	12.85	2.75	3.00	2.75	15.00	14.50	3.00	1.60	2.50	10.00	2.50	22.45
max	108.00	125.00	154.00	115.00	61.55	25.00	25.00	25.00	24.00	55.00	62.50	37.70
s.d.	28.93	35.39	32.37	22.69	NaN	4.67	5.10	5.37	NaN	16.95	20.42	NaN
Mixed layer temperature : T_ml (deg.C)												
mean	1.26	0.53	0.25	1.58	2.58	5.56	14.19	17.44	15.84	10.68	6.58	4.65
median	1.18	0.34	0.08	1.22	2.17	4.42	14.22	17.16	14.73	11.80	6.61	4.56
min	0.84	-0.55	-1.54	-0.04	1.05	3.92	7.60	14.18	14.57	6.39	4.98	4.37
max	1.88	2.44	3.37	3.83	4.94	8.04	17.46	21.06	19.32	13.16	9.01	5.12
s.d.	0.34	1.01	0.98	1.11	NaN	1.88	1.67	1.78	NaN	2.47	1.25	NaN
Mixed layer salinity : S_ml (psu)												
mean	31.68	32.31	32.04	32.17	31.97	31.36	31.06	30.98	31.12	30.85	31.48	31.25
median	31.83	32.33	32.12	32.37	31.86	31.41	31.07	31.22	31.08	31.10	31.74	31.15
min	30.73	31.83	30.83	31.09	31.74	30.71	29.70	28.92	30.49	29.50	30.50	31.12
max	32.25	32.85	32.88	32.90	32.41	32.41	32.14	32.52	31.81	31.83	32.28	31.58
s.d.	0.46	0.27	0.39	0.49	NaN	0.59	0.54	0.93	NaN	0.79	0.59	NaN
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.36	25.90	25.70	25.73	25.49	24.71	23.09	22.32	22.78	23.57	24.69	24.74
median	25.48	25.95	25.76	25.86	25.43	24.49	23.02	22.56	23.03	23.56	24.90	24.68
min	24.62	25.57	24.76	24.86	25.20	24.36	21.45	20.05	21.50	22.11	23.70	24.64
max	25.78	26.25	26.26	26.22	25.88	25.23	25.04	23.70	23.56	24.78	25.32	24.95
s.d.	0.35	0.18	0.30	0.38	NaN	0.39	0.62	1.02	NaN	0.95	0.56	NaN

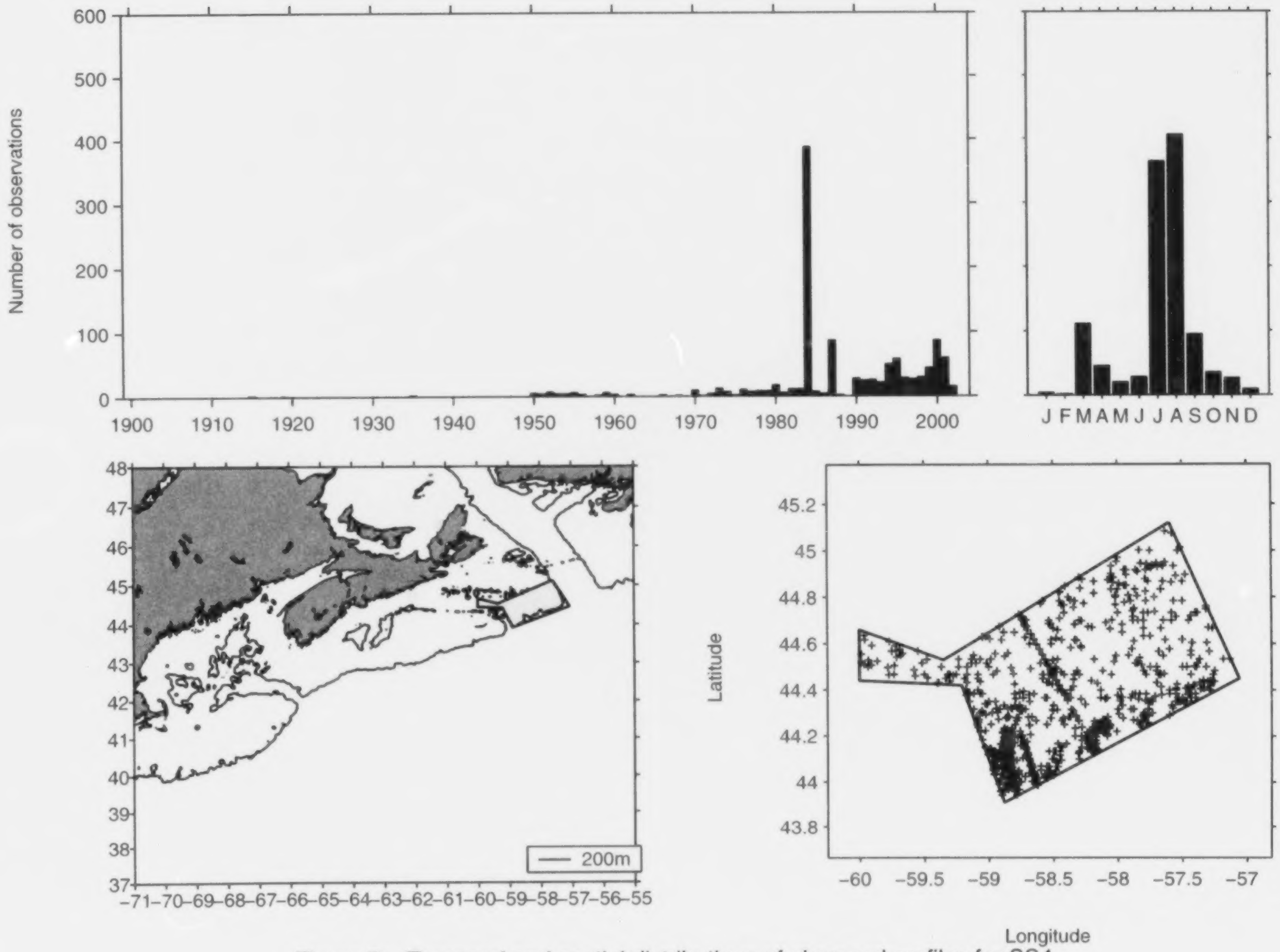

Figure 7a. Temporal and spatial distributions of observed profiles for SS4.

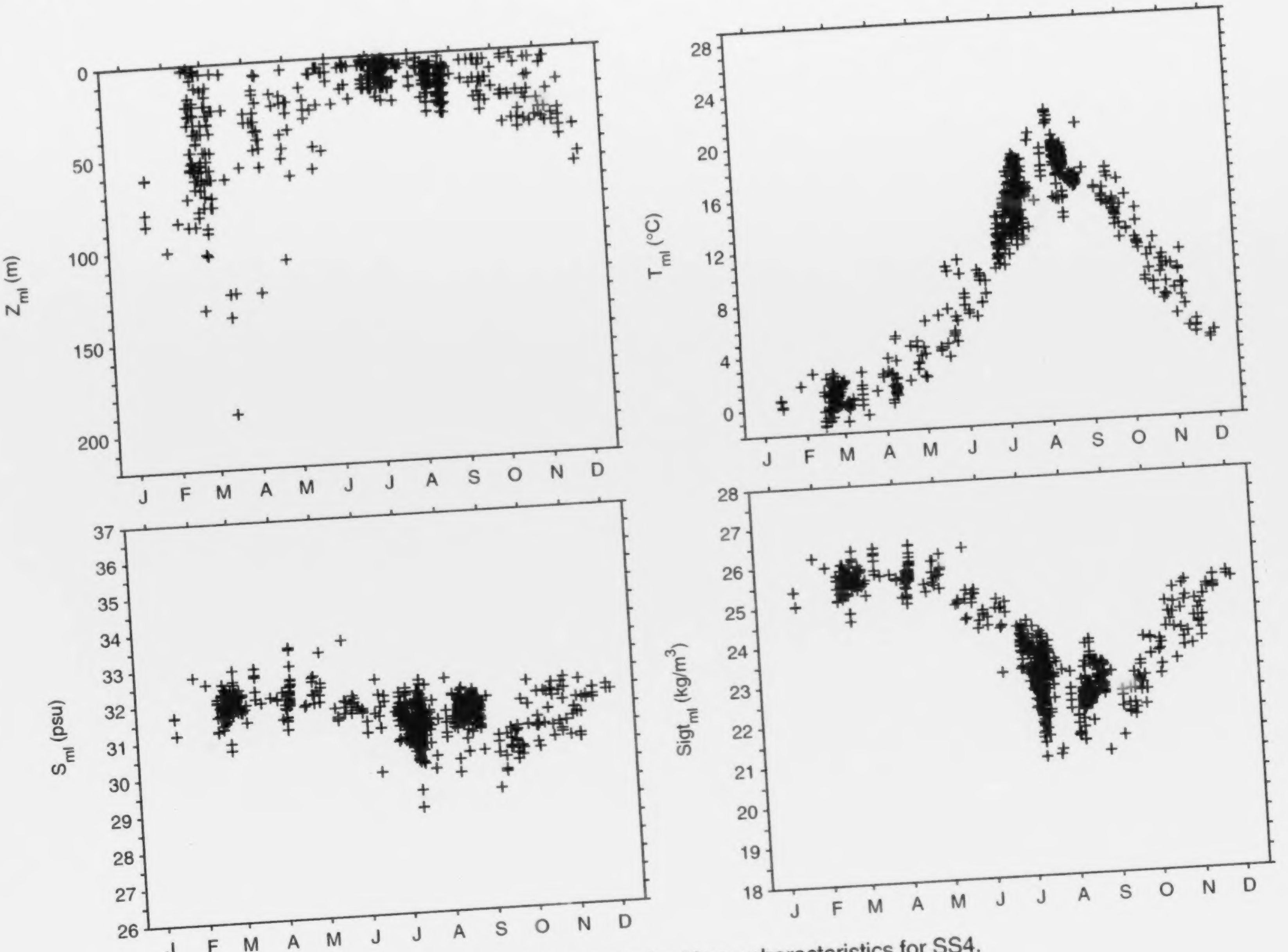

Figure 7b. Calculated mixed layer characteristics for SS4.

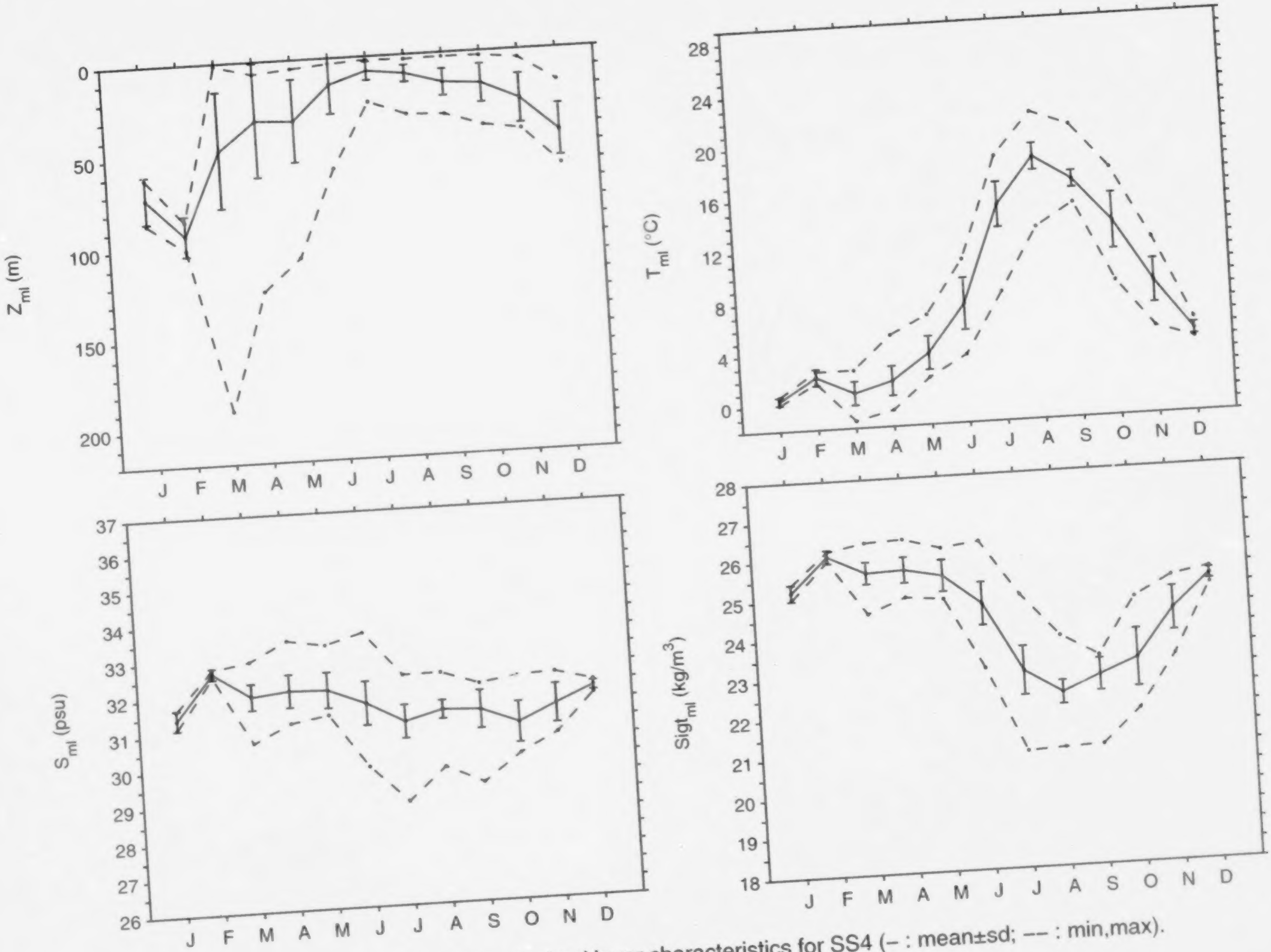

Figure 7c. Monthly statistics of mixed layer characteristics for SS4 (– : mean±sd; -- : min,max).

Table 5. Monthly statistics of mixed layer characteristics for SS4.

Profiles extracted (#) : 1362   Profiles retained (#) : 1142   Profiles rejected (%) : 16.2
Mean seabed depth (m) for subregion : 131.4   Mean sounding depth (m) for profiles : 233.3

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	4	2	111	45	20	28	362	406	94	35	26	9
Mixed layer depth : Z_ml (m)												
mean	72.15	92.75	46.97	31.70	32.83	14.46	8.02	10.39	16.13	17.57	26.54	44.26
median	70.75	92.75	47.50	27.50	25.55	7.50	7.50	7.85	17.33	17.50	30.00	42.90
min	61.00	85.00	1.50	6.80	4.95	3.25	2.00	2.75	2.35	2.75	4.80	17.55
max	86.10	100.50	190.00	125.00	107.50	59.50	24.55	32.00	32.95	39.50	42.50	62.50
s.d.	NaN	NaN	31.45	30.71	22.20	15.33	5.03	4.53	7.14	10.14	12.88	13.99
Mixed layer temperature : T_ml (deg.C)												
mean	0.38	2.16	0.78	1.62	3.67	7.33	14.85	18.39	16.53	13.18	8.39	4.53
median	0.39	2.16	0.76	1.41	3.81	7.41	14.96	18.43	16.60	13.35	8.38	4.45
min	0.07	1.70	-1.43	-0.69	1.75	3.40	8.14	13.00	14.76	8.55	4.88	3.87
max	0.68	2.61	2.59	5.23	6.66	10.78	18.59	21.87	20.77	17.30	11.78	5.43
s.d.	NaN	NaN	0.93	1.15	1.32	2.00	1.73	1.01	0.63	2.17	1.69	0.46
Mixed layer salinity : S_ml (psu)												
mean	31.43	32.66	31.99	32.10	32.07	31.66	31.10	31.38	31.33	30.92	31.39	31.82
median	31.43	32.66	31.99	32.03	32.11	31.68	31.07	31.36	31.36	30.88	31.35	31.85
min	31.19	32.56	30.71	31.21	31.38	29.90	28.88	29.78	29.30	30.06	30.58	31.64
max	31.68	32.77	32.95	33.48	33.31	33.60	32.38	32.39	32.04	32.20	32.25	31.98
s.d.	NaN	NaN	0.35	0.45	0.49	0.60	0.46	0.25	0.52	0.57	0.53	0.12
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.21	26.09	25.63	25.67	25.48	24.72	22.99	22.40	22.80	23.18	24.37	25.21
median	25.21	26.09	25.63	25.64	25.53	24.72	22.97	22.37	22.84	23.11	24.39	25.24
min	25.02	25.97	24.59	24.97	24.88	23.10	20.95	21.00	21.03	21.90	23.23	24.98
max	25.39	26.21	26.40	26.44	26.18	26.30	24.89	23.82	23.29	24.71	25.21	25.38
s.d.	NaN	NaN	0.28	0.32	0.40	0.54	0.61	0.30	0.40	0.72	0.55	0.14

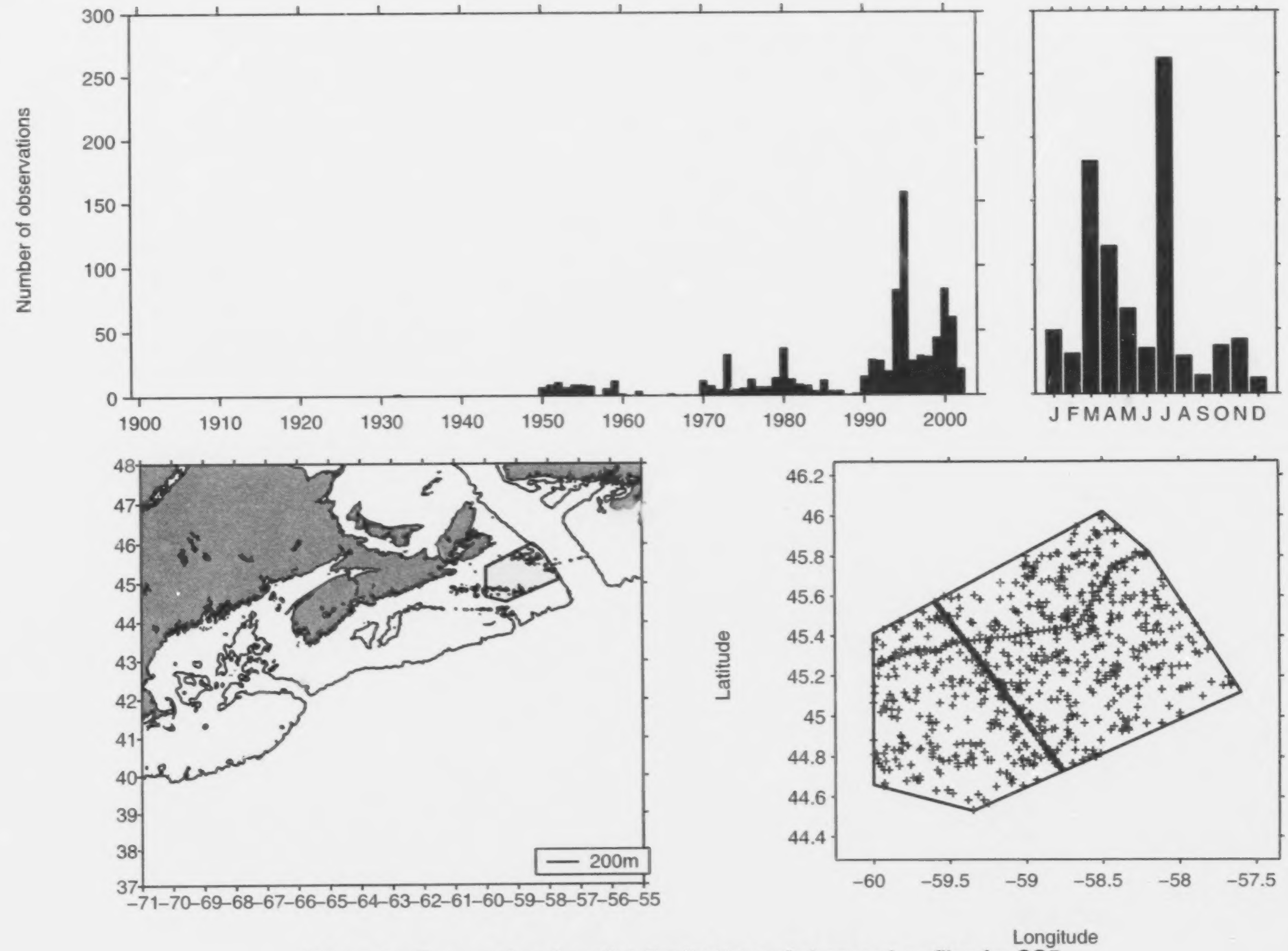

Figure 8a. Temporal and spatial distributions of observed profiles for SS5.

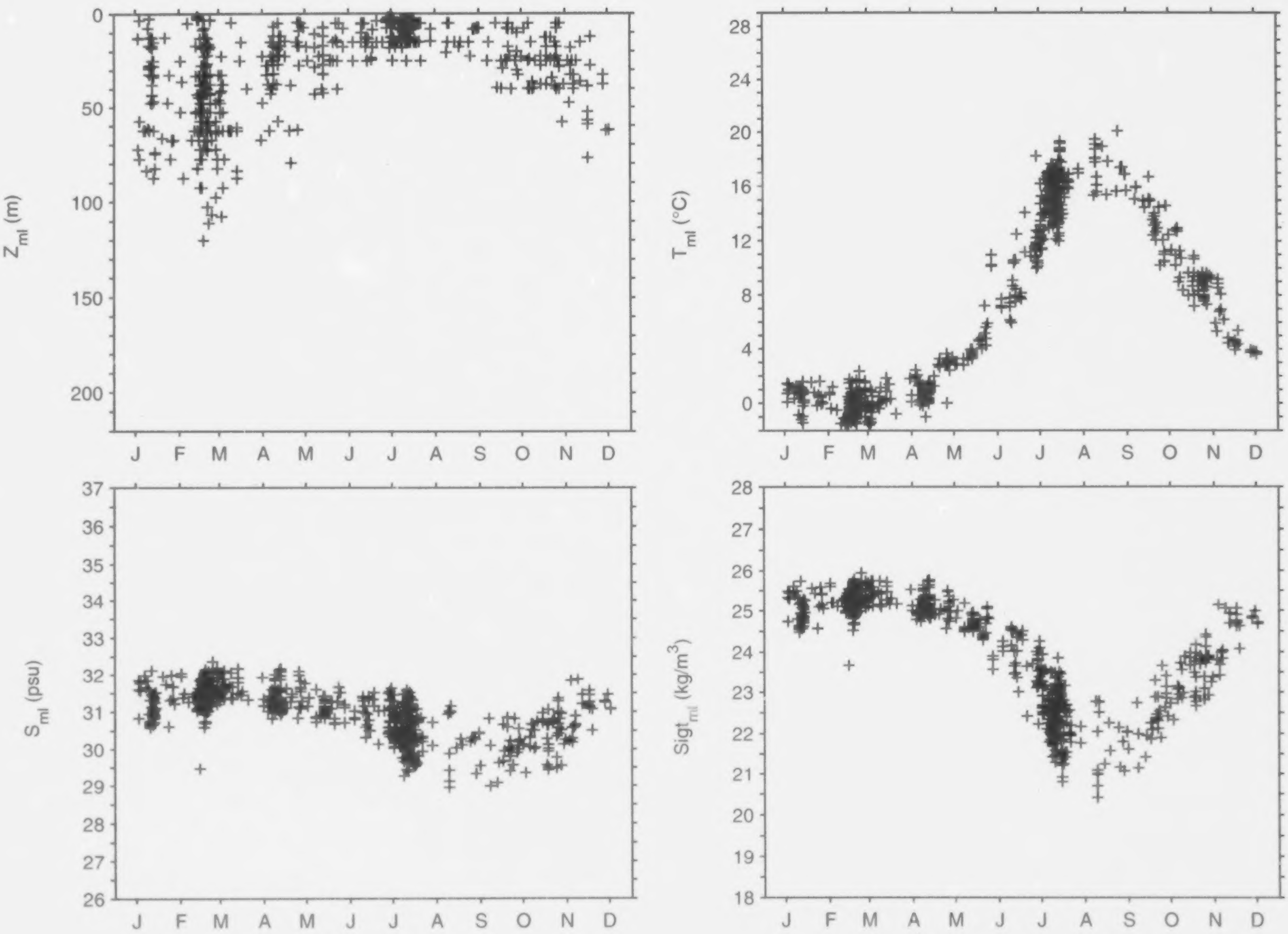

Figure 8b. Calculated mixed layer characteristics for SS5.

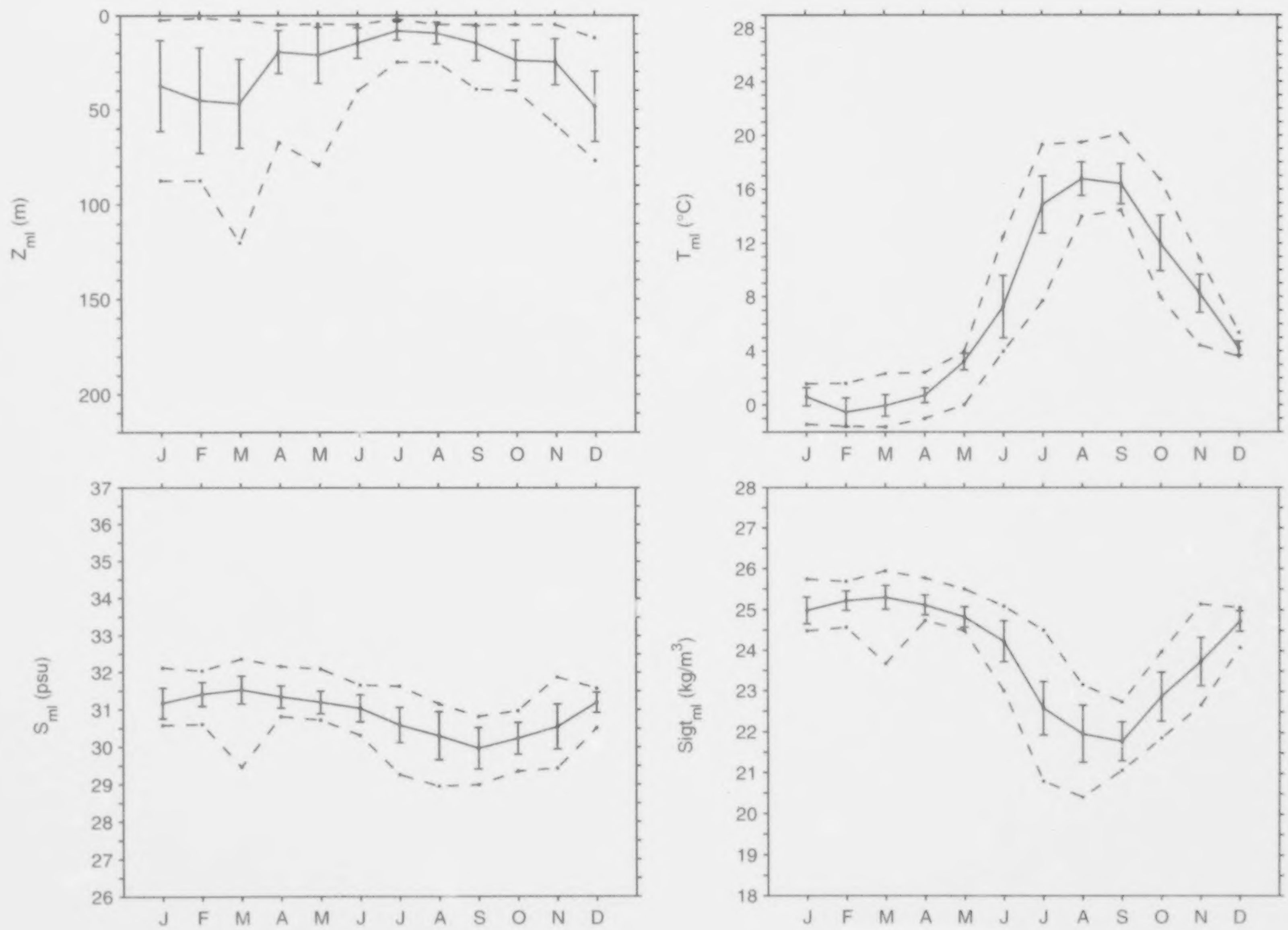

Figure 8c. Monthly statistics of mixed layer characteristics for SS5 (– : mean±sd; -- : min,max).

Table 6. Monthly statistics of mixed layer characteristics for SS5.

Profiles extracted (#) : 984 Profiles retained (#) : 872 Profiles rejected (%) : 11.4
Mean seabed depth (m) for subregion : 136.1 Mean sounding depth (m) for profiles : 147.9

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	49	31	181	114	66	35	261	30	14	37	42	12
Mixed layer depth : Z_ml (m)												
mean	37.42	45.22	46.91	19.53	21.22	14.81	8.29	9.55	14.88	24.08	24.79	48.42
median	29.00	52.50	46.00	16.90	17.27	15.00	7.50	5.00	15.00	24.85	25.00	54.80
min	2.50	1.50	2.50	5.00	4.60	5.00	2.00	4.95	5.00	5.00	5.00	12.20
max	87.50	87.50	120.00	67.50	79.50	40.00	25.00	25.00	39.35	40.00	58.00	77.00
s.d.	24.03	27.87	23.49	11.42	14.94	8.14	4.98	5.84	9.26	10.71	12.19	18.65
Mixed layer temperature : T_ml (deg.C)												
mean	0.62	-0.54	-0.04	0.72	3.24	7.28	14.88	16.77	16.41	11.99	8.24	4.21
median	0.81	-1.06	-0.02	0.79	3.41	7.20	15.53	16.45	15.96	12.08	8.57	4.09
min	-1.44	-1.58	-1.63	-1.00	0.00	4.00	7.70	14.00	14.46	7.96	4.44	3.61
max	1.58	1.60	2.34	2.43	3.96	12.49	19.32	19.48	20.10	16.71	10.89	5.39
s.d.	0.68	1.06	0.81	0.56	0.62	2.30	2.10	1.24	1.48	2.08	1.41	0.51
Mixed layer salinity : S_ml (psu)												
mean	31.17	31.41	31.53	31.34	31.20	31.04	30.60	30.31	29.97	30.24	30.55	31.19
median	31.10	31.38	31.53	31.26	31.11	31.02	30.59	30.33	30.16	30.20	30.62	31.20
min	30.58	30.61	29.47	30.82	30.73	30.32	29.27	28.95	28.99	29.35	29.43	30.51
max	32.12	32.04	32.37	32.16	32.09	31.66	31.63	31.15	30.82	30.97	31.87	31.57
s.d.	0.41	0.32	0.37	0.30	0.30	0.36	0.47	0.64	0.56	0.42	0.60	0.27
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	24.98	25.22	25.30	25.12	24.83	24.24	22.58	21.96	21.78	22.87	23.73	24.73
median	24.93	25.22	25.31	25.05	24.76	24.34	22.52	22.04	21.87	22.88	23.81	24.73
min	24.48	24.57	23.67	24.74	24.49	23.01	20.80	20.41	21.07	21.87	22.66	24.08
max	25.74	25.69	25.95	25.77	25.51	25.09	24.51	23.16	22.73	23.98	25.14	25.06
s.d.	0.32	0.23	0.29	0.24	0.25	0.50	0.65	0.69	0.48	0.60	0.60	0.25

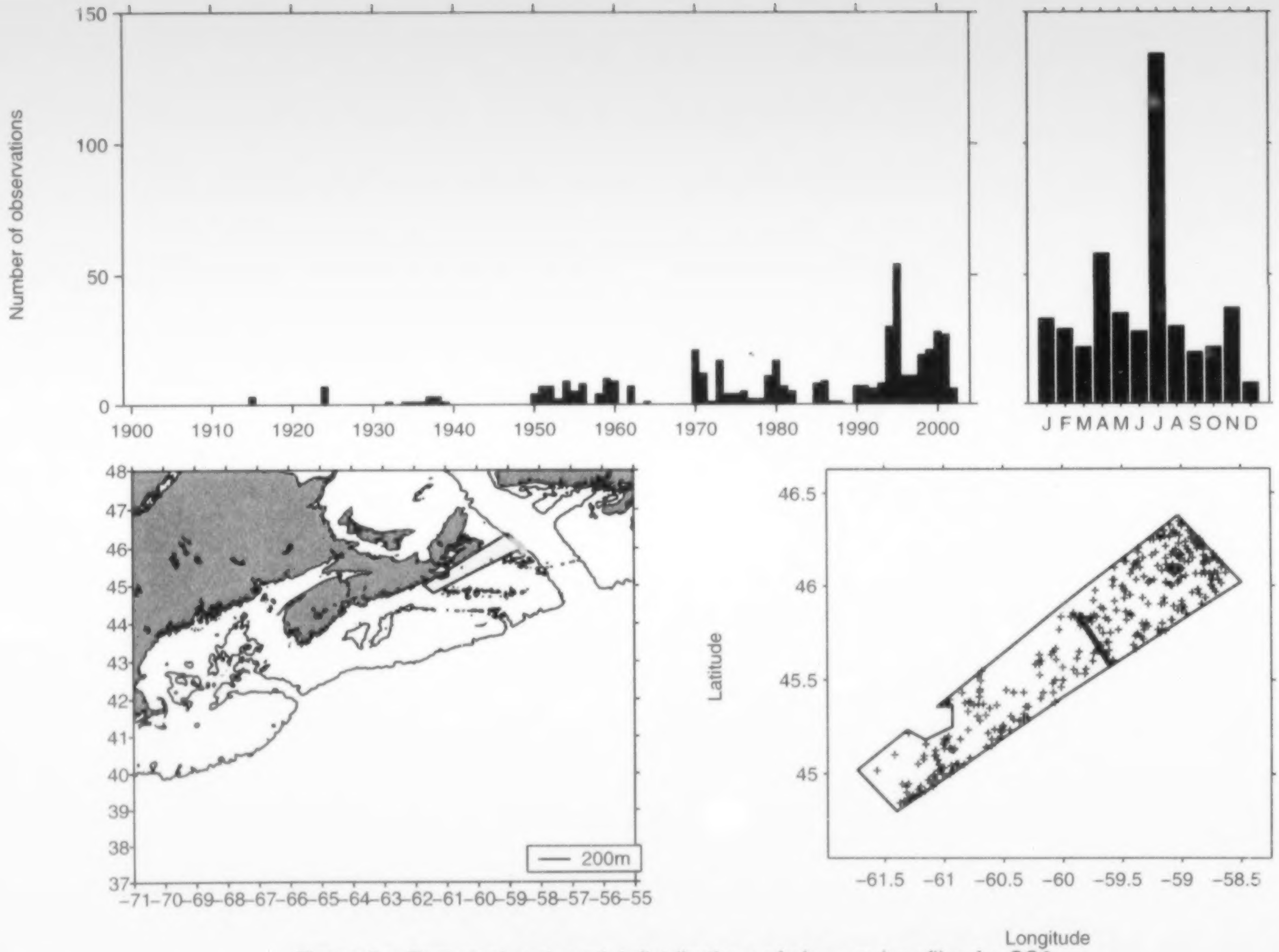

Figure 9a. Temporal and spatial distributions of observed profiles for SS6.

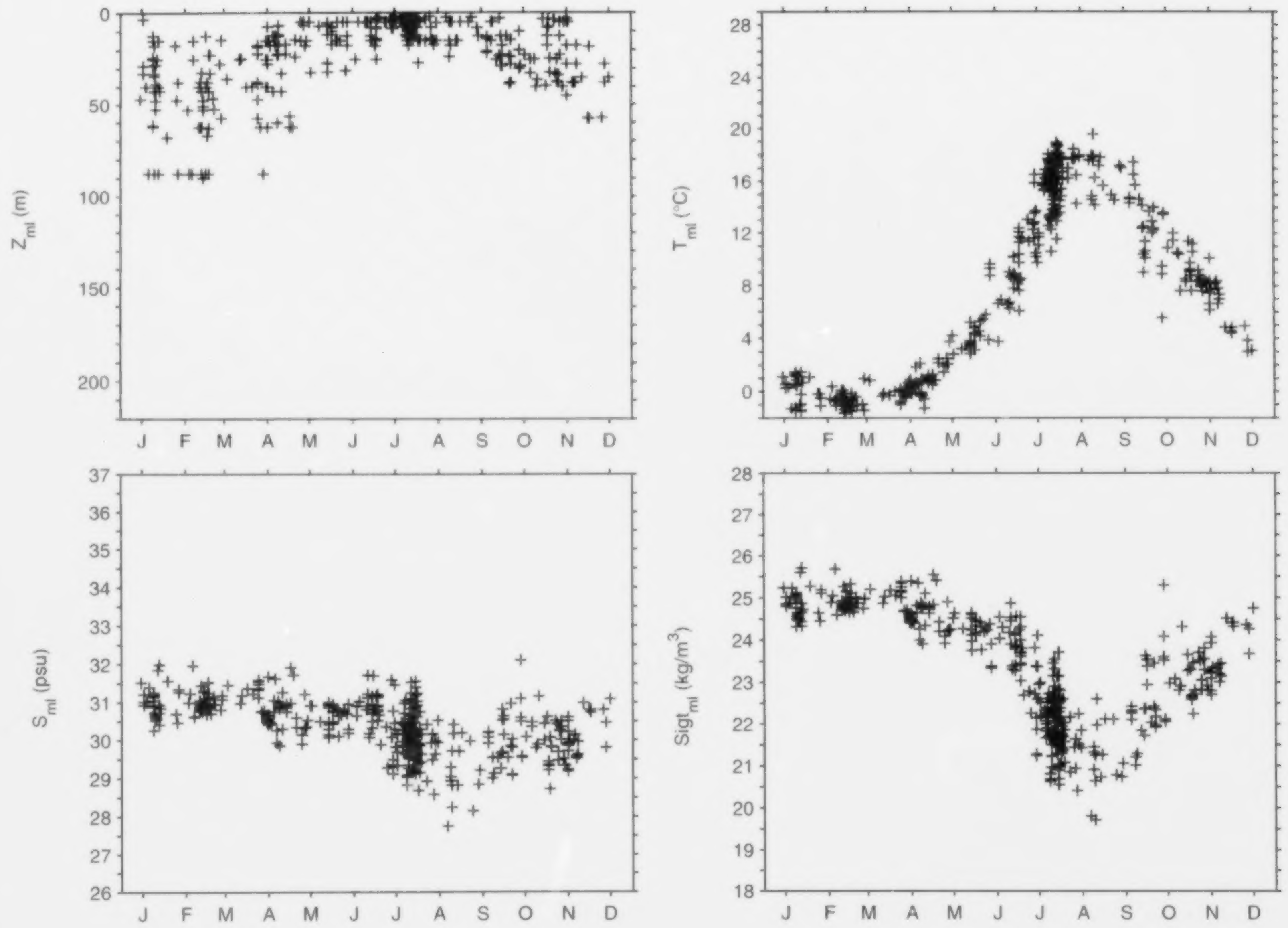

Figure 9b. Calculated mixed layer characteristics for SS6.

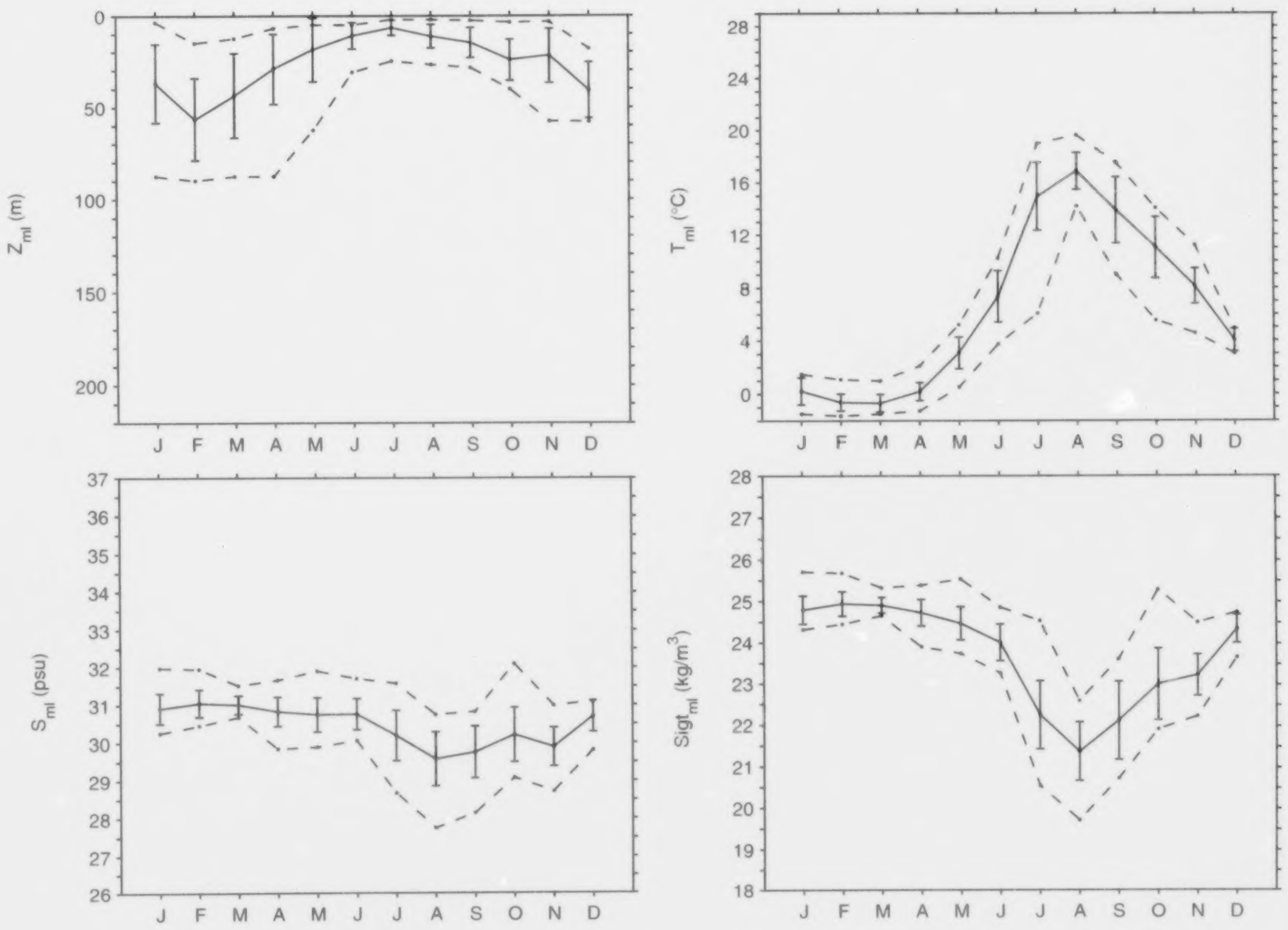

Figure 9c. Monthly statistics of mixed layer characteristics for SS6 (– : mean±sd; -- : min,max).

Table 7. Monthly statistics of mixed layer characteristics for SS6.

Profiles extracted (#) : 555 Profiles retained (#) : 456 Profiles rejected (%) : 17.8
Mean seabed depth (m) for subregion : 118.1 Mean sounding depth (m) for profiles : 123.8

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	33	29	22	57	36	28	134	30	20	22	37	8
Mixed layer depth : Z_ml (m)												
mean	36.97	56.44	43.57	29.07	18.60	11.00	6.51	11.24	14.77	24.17	21.87	40.75
median	32.65	53.00	38.75	22.00	11.85	6.75	5.00	14.35	13.50	24.95	22.40	36.25
min	3.50	15.00	12.50	6.85	4.95	5.00	2.00	2.10	2.50	3.50	3.25	18.15
max	87.50	89.85	87.50	87.50	62.50	31.00	25.00	26.85	28.50	40.00	57.60	57.85
s.d.	21.34	22.38	22.92	19.08	17.48	7.32	4.16	6.53	8.36	11.27	14.86	15.20
Mixed layer temperature : T_ml (deg.C)												
mean	0.23	-0.62	-0.68	0.18	3.08	7.35	14.92	16.87	13.88	11.05	8.13	4.03
median	0.58	-0.61	-0.79	0.05	3.30	7.78	15.65	17.41	14.63	11.42	8.28	4.14
min	-1.49	-1.65	-1.50	-1.27	0.51	3.75	6.08	14.20	9.02	5.55	4.57	3.02
max	1.48	1.09	0.98	2.10	5.20	10.20	18.96	19.60	17.50	14.05	11.20	4.94
s.d.	1.02	0.64	0.66	0.67	1.19	1.93	2.59	1.40	2.52	2.31	1.32	0.86
Mixed layer salinity : S_ml (psu)												
mean	30.91	31.06	31.01	30.83	30.75	30.77	30.20	29.58	29.76	30.21	29.89	30.70
median	30.89	30.97	30.97	30.86	30.86	30.79	30.15	29.67	29.80	30.06	29.91	30.81
min	30.26	30.46	30.69	29.85	29.90	30.07	28.68	27.75	28.15	29.08	28.72	29.81
max	31.99	31.96	31.53	31.67	31.91	31.71	31.58	30.75	30.82	32.10	30.99	31.09
s.d.	0.40	0.36	0.24	0.39	0.45	0.41	0.66	0.71	0.69	0.72	0.51	0.41
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	24.79	24.94	24.91	24.73	24.48	24.02	22.26	21.38	22.13	23.02	23.24	24.36
median	24.77	24.90	24.88	24.75	24.47	24.12	22.18	21.44	22.18	23.02	23.22	24.36
min	[illegible]	24.45	24.66	23.91	23.75	23.27	20.55	19.72	20.74	21.92	22.24	23.67
max	[illegible]	25.68	25.33	25.40	25.55	24.87	24.55	22.61	23.63	25.30	24.51	24.75
s.d.	0.34	0.29	0.19	0.32	0.40	0.44	0.82	0.71	0.94	0.87	0.50	0.34

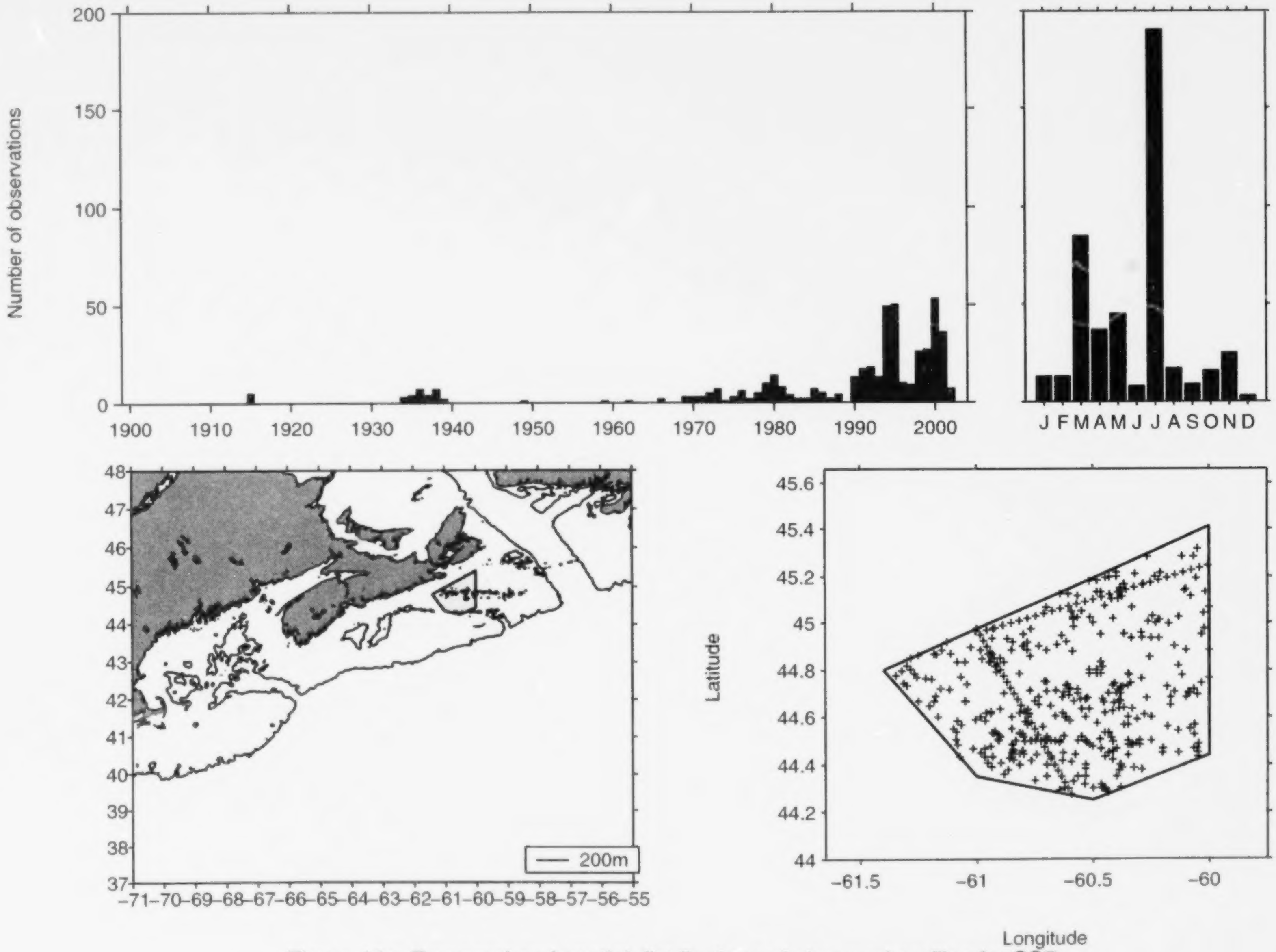

Figure 10a. Temporal and spatial distributions of observed profiles for SS7.

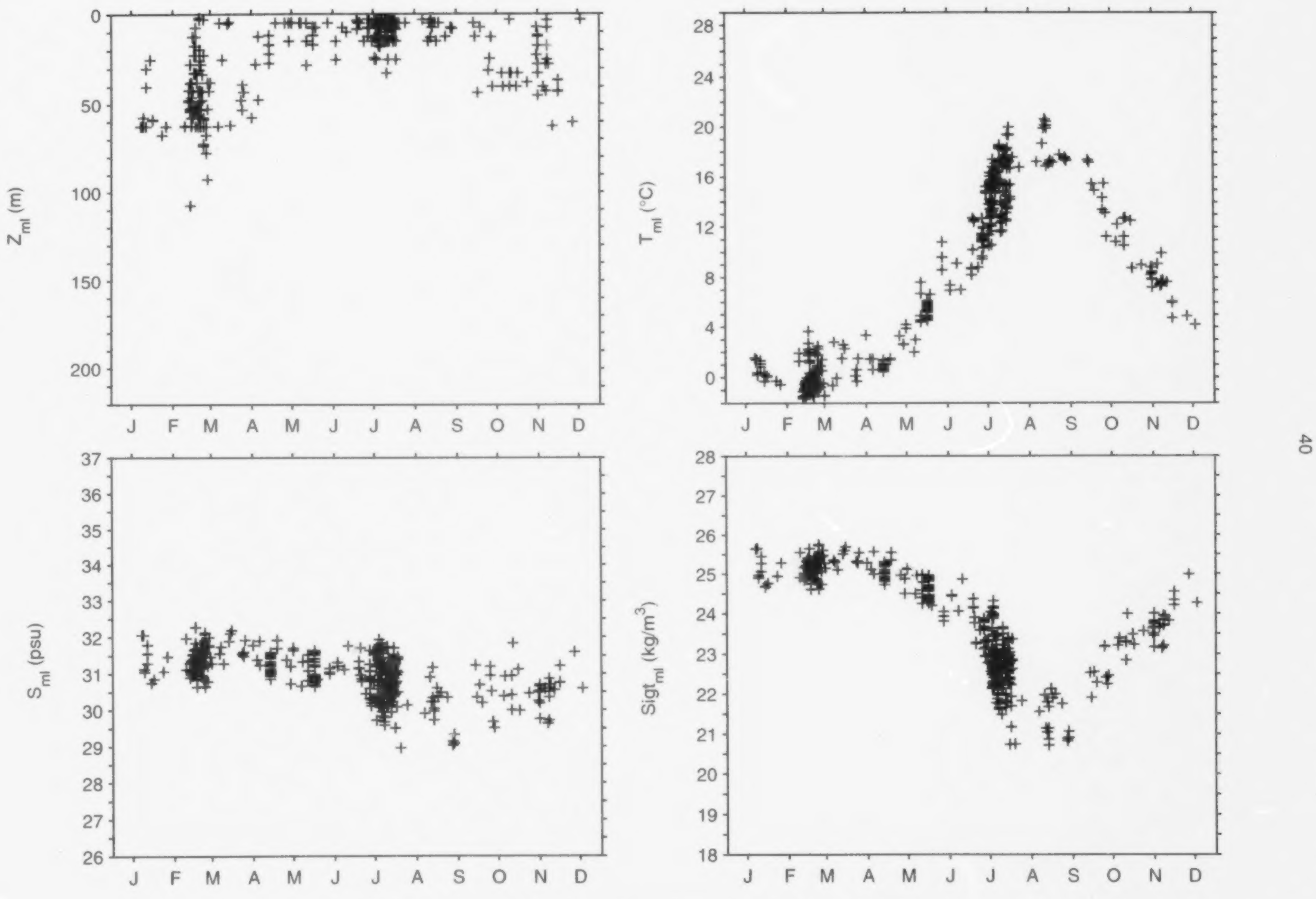

Figure 10b. Calculated mixed layer characteristics for SS7.

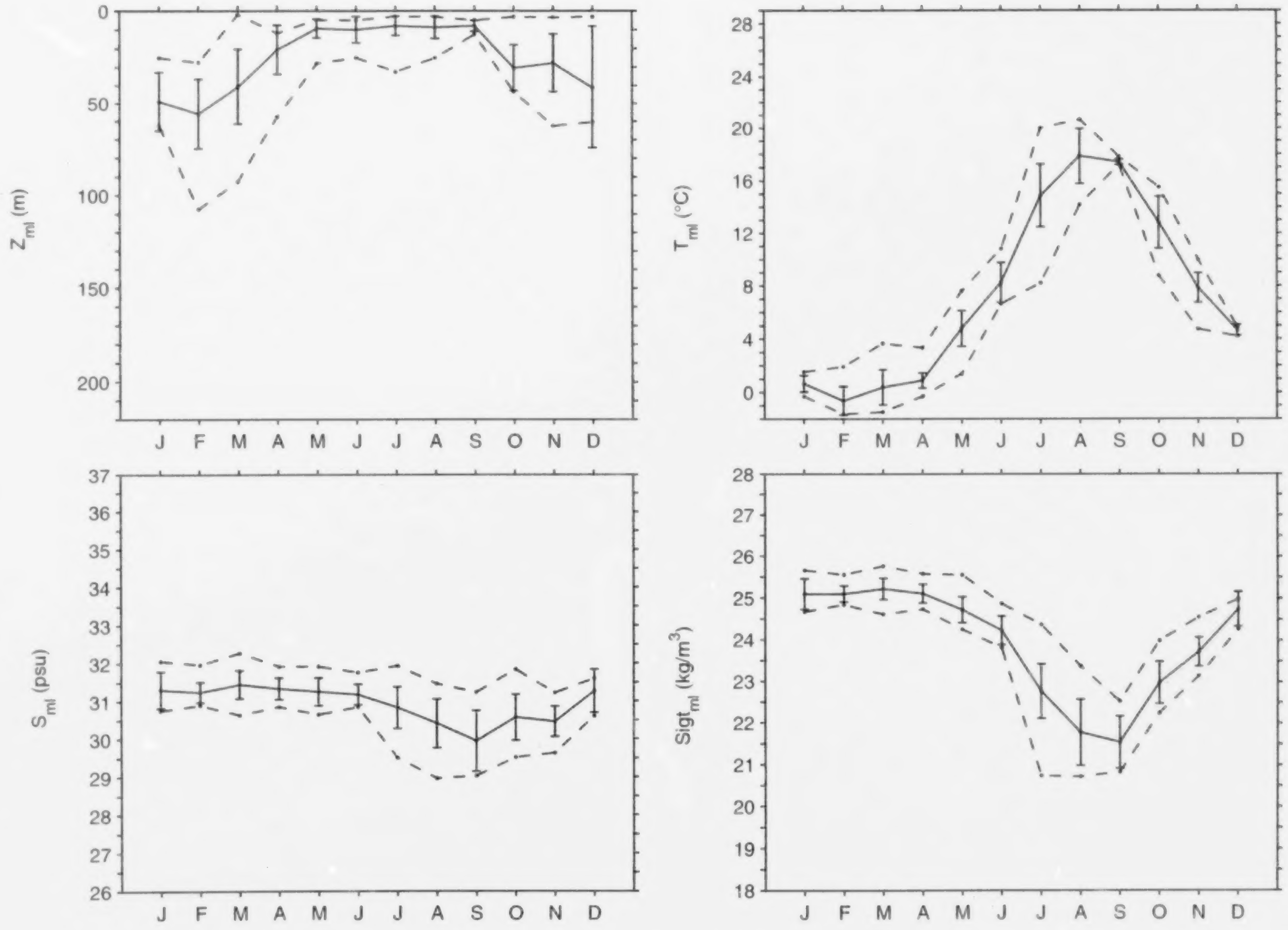

Figure 10c. Monthly statistics of mixed layer characteristics for SS7 (– : mean±sd; –– : min,max).

Table 8. Monthly statistics of mixed layer characteristics for SS7.

Profiles extracted (#) : 525 Profiles retained (#) : 461 Profiles rejected (%) : 12.2
Mean seabed depth (m) for subregion : 119.7 Mean sounding depth (m) for profiles : 119.2

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	13	13	85	37	45	8	190	17	9	16	25	3
Mixed layer depth : Z_ml (m)												
mean	49.02	55.77	40.87	20.70	9.42	10.00	7.95	8.72	7.94	30.41	27.81	41.25
median	58.50	52.75	42.50	16.80	7.60	7.50	7.50	5.00	7.75	32.50	27.50	60.30
min	25.00	27.50	2.00	11.80	4.90	5.00	3.00	3.25	5.00	3.25	3.50	3.15
max	62.50	107.50	92.50	57.50	28.00	25.00	32.50	25.00	12.50	43.45	62.50	60.30
s.d.	16.18	19.14	20.53	13.06	4.98	6.94	5.05	5.91	2.91	12.48	15.55	NaN
Mixed layer temperature : T_ml (deg.C)												
mean	0.66	-0.63	0.38	0.89	4.79	8.26	14.86	17.86	17.40	12.82	7.85	4.67
median	0.38	-0.98	0.05	0.79	4.91	7.99	15.30	17.33	17.40	12.72	7.79	4.90
min	-0.30	-1.64	-1.48	-0.30	1.40	6.63	8.22	14.20	17.20	8.77	4.74	4.21
max	1.54	1.93	3.67	3.36	7.60	10.80	19.99	20.64	17.80	15.50	9.96	4.90
s.d.	0.61	1.08	1.31	0.56	1.34	1.50	2.38	2.09	0.20	1.99	1.12	NaN
Mixed layer salinity : S_ml (psu)												
mean	31.31	31.25	31.45	31.34	31.26	31.18	30.83	30.41	29.94	30.57	30.46	31.26
median	31.13	31.12	31.45	31.38	31.33	31.13	30.82	30.34	30.35	30.61	30.55	31.60
min	30.76	30.90	30.64	30.86	30.65	30.85	29.51	28.96	29.03	29.51	29.63	30.60
max	32.06	31.97	32.28	31.93	31.92	31.76	31.94	31.46	31.23	31.84	31.22	31.60
s.d.	0.49	0.27	0.37	0.29	0.37	0.27	0.55	0.64	0.80	0.61	0.40	NaN
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.09	25.09	25.21	25.11	24.72	24.23	22.77	21.78	21.54	22.98	23.72	24.75
median	24.97	25.01	25.23	25.11	24.71	24.13	22.71	21.80	21.76	23.18	23.73	24.99
min	24.67	24.84	24.61	24.73	24.25	23.81	20.74	20.72	20.83	22.25	23.14	24.27
max	25.66	25.55	25.76	25.57	25.55	24.87	24.37	23.37	22.53	23.99	24.56	24.99
s.d.	0.36	0.19	0.25	0.22	0.31	0.34	0.66	0.79	0.63	0.51	0.35	NaN

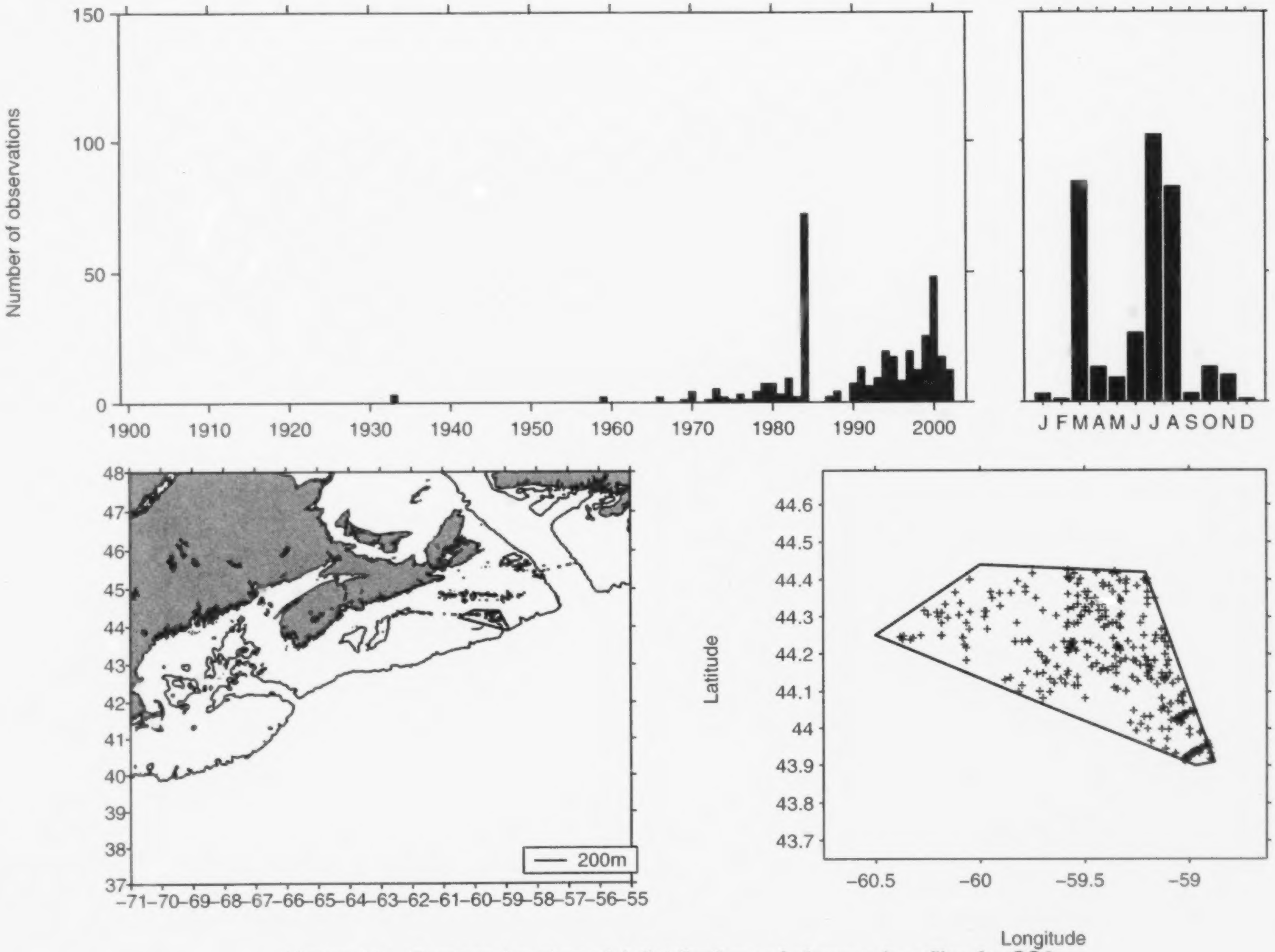

Figure 11a. Temporal and spatial distributions of observed profiles for SS8.

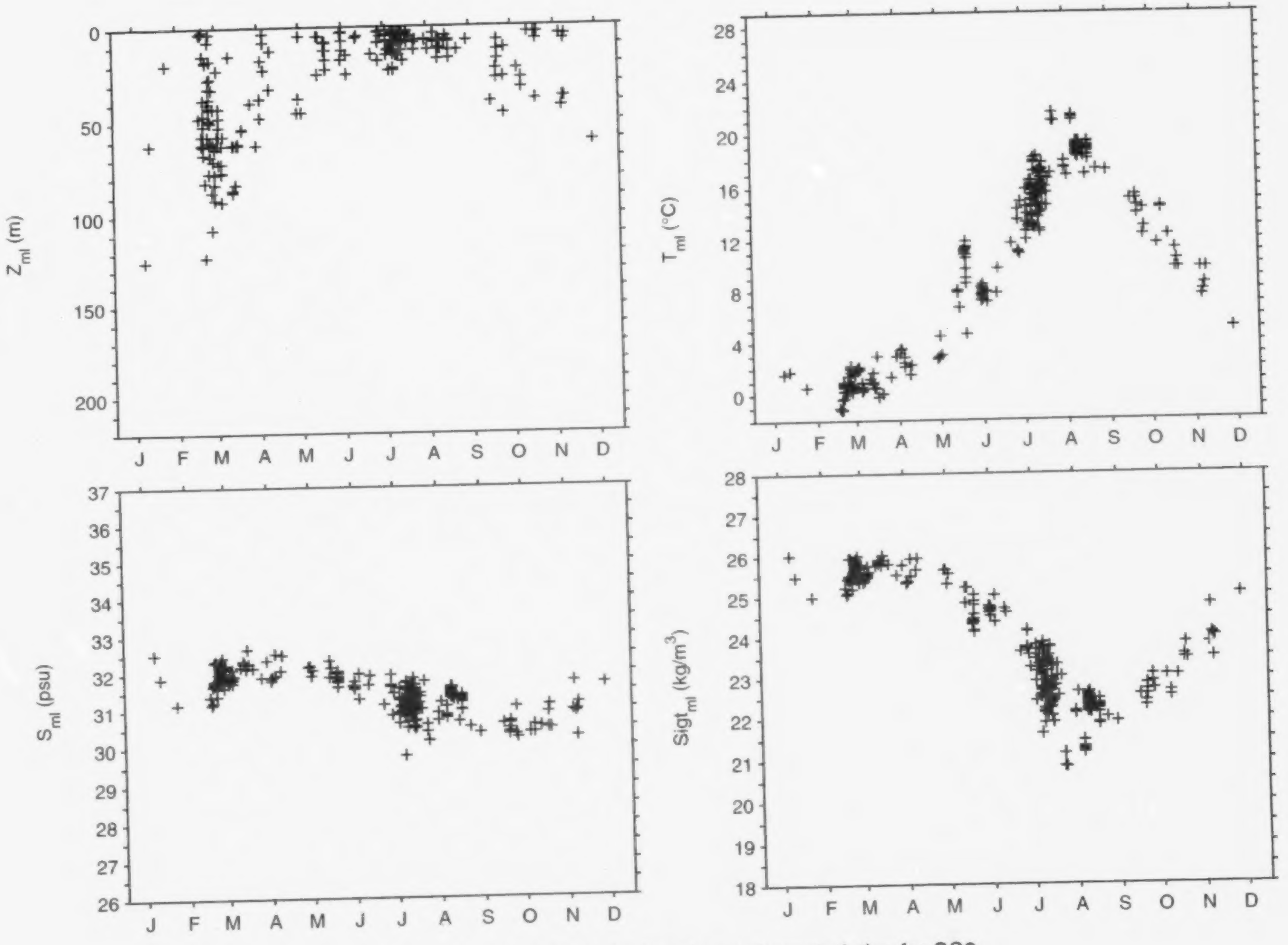

Figure 11b. Calculated mixed layer characteristics for SS8.

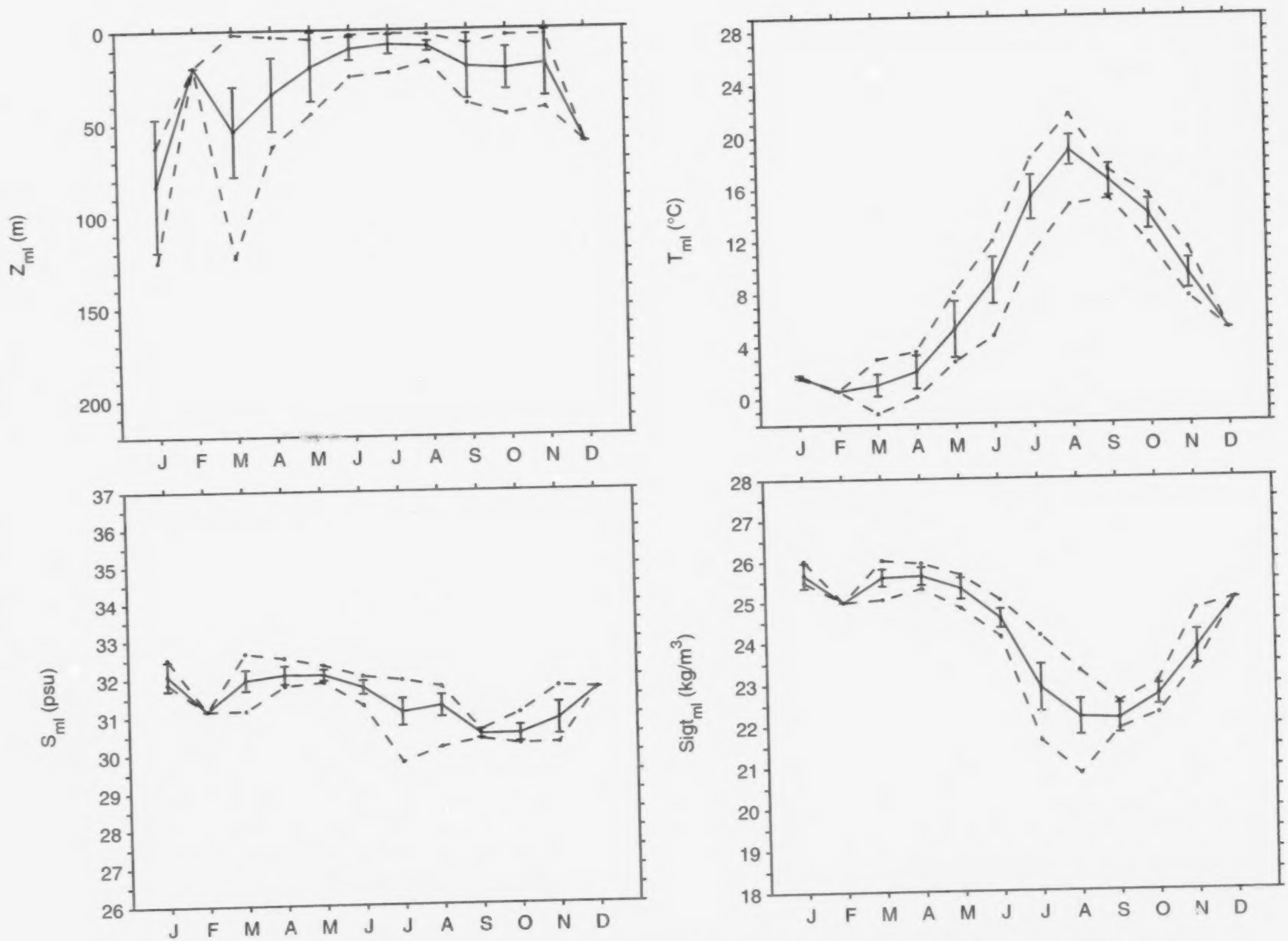

Figure 11c. Monthly statistics of mixed layer characteristics for SS8 (– : mean±sd; -- : min,max).

Table 9. Monthly statistics of mixed layer characteristics for SS8.

Profiles extracted (#) : 395 Profiles retained (#) : 347 Profiles rejected (%) : 12.2
Mean seabed depth (m) for subregion : 180.5 Mean sounding depth (m) for profiles : 246.6

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	3	1	84	13	9	26	102	82	3	13	10	1
Mixed layer depth : Z_ml (m)												
mean	83.20	19.65	54.08	34.23	19.68	10.00	7.90	8.90	19.98	21.21	18.77	61.10
median	62.30	19.65	57.50	37.50	5.00	8.25	7.50	7.75	12.50	22.50	7.33	61.10
min	62.30	19.65	2.00	3.50	4.85	2.75	2.00	2.65	7.65	3.50	3.50	61.10
max	125.00	19.65	122.80	62.50	45.00	25.00	23.00	17.15	39.80	46.00	42.50	61.10
s.d.	NaN	NaN	24.15	19.74	18.43	6.17	5.17	2.59	NaN	11.37	17.56	NaN
Mixed layer temperature : T_ml (deg.C)												
mean	1.70	0.55	1.00	1.98	5.20	8.91	15.23	18.84	16.52	13.84	9.29	5.09
median	1.76	0.55	0.81	2.25	4.50	8.37	15.50	18.85	17.20	14.36	9.70	5.09
min	1.56	0.55	-1.20	0.06	2.71	4.66	10.87	14.61	15.08	11.62	7.54	5.09
max	1.76	0.55	2.94	3.52	8.00	11.88	18.24	21.55	17.27	15.36	11.24	5.09
s.d.	NaN	NaN	0.83	1.27	2.14	1.77	1.73	1.15	NaN	1.16	1.16	NaN
Mixed layer salinity : S_ml (psu)												
mean	32.09	31.16	31.96	32.09	32.09	31.76	31.10	31.25	30.49	30.49	30.88	31.67
median	31.87	31.16	31.94	32.07	32.14	31.76	31.05	31.36	30.51	30.46	30.92	31.67
min	31.87	31.16	31.16	31.80	31.89	31.29	29.77	30.16	30.36	30.22	30.24	31.67
max	32.52	31.16	32.66	32.53	32.34	32.05	31.94	31.76	30.60	31.04	31.73	31.67
s.d.	NaN	NaN	0.27	0.24	0.15	0.18	0.36	0.29	NaN	0.22	0.42	NaN
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.66	24.98	25.60	25.64	25.32	24.58	22.90	22.20	22.16	22.73	23.84	25.03
median	25.48	24.98	25.56	25.66	25.30	24.61	22.79	22.25	22.01	22.70	23.84	25.03
min	25.48	24.98	25.05	25.32	24.83	24.13	21.63	20.84	21.91	22.28	23.45	25.03
max	26.02	24.98	26.02	25.95	25.66	25.03	24.16	23.31	22.56	23.06	24.77	25.03
s.d.	NaN	NaN	0.21	0.22	0.26	0.23	0.56	0.43	NaN	0.25	0.41	NaN

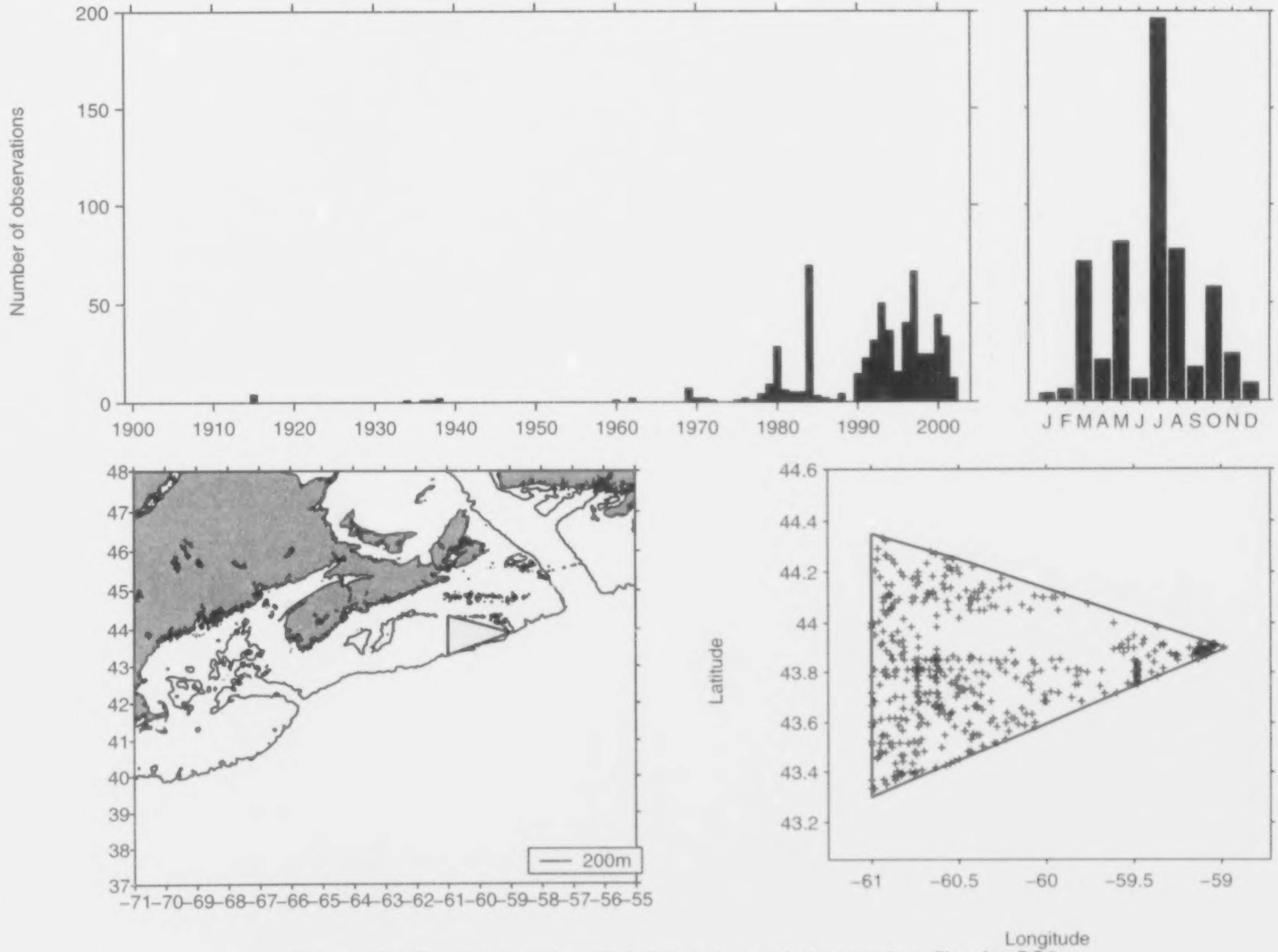

Figure 12a. Temporal and spatial distributions of observed profiles for SS9.

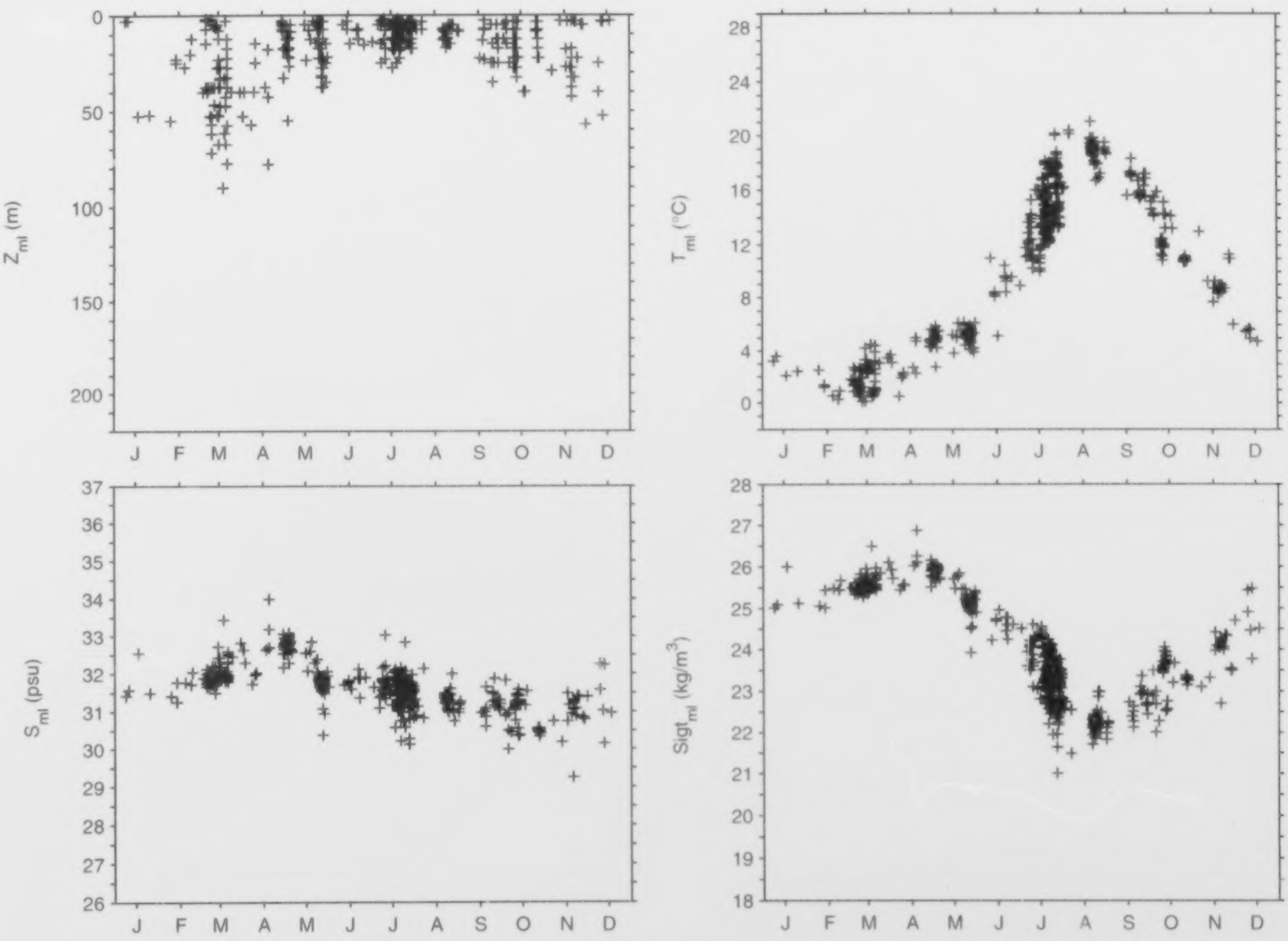

Figure 12b. Calculated mixed layer characteristics for SS9.

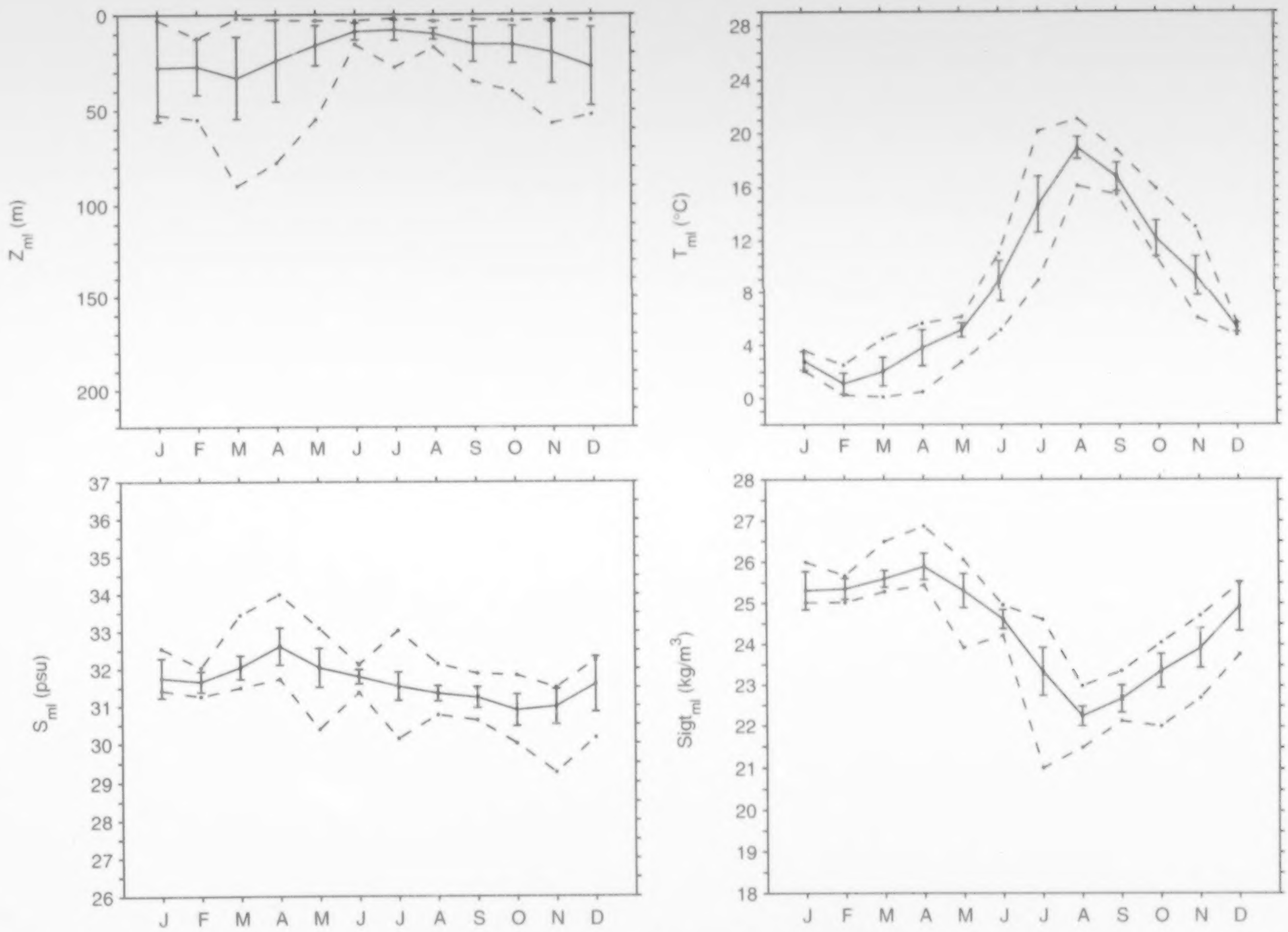

Figure 12c. Monthly statistics of mixed layer characteristics for SS9 (– : mean±sd; -- : min,max).

Table 10. Monthly statistics of mixed layer characteristics for SS9.

Profiles extracted (#) : 725 Profiles retained (#) : 575 Profiles rejected (%) : 20.7
Mean seabed depth (m) for subregion : 62.9 Mean sounding depth (m) for profiles : 79.7

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	4	6	71	21	81	11	195	76	19	58	24	9
Mixed layer depth : Z_ml (m)												
mean	27.60	27.18	33.05	24.10	16.14	8.88	8.15	10.09	15.55	15.74	19.86	27.21
median	27.50	24.00	37.50	17.75	15.00	7.50	7.50	11.72	13.25	17.45	20.20	25.00
min	2.90	12.40	2.00	3.00	3.25	3.25	2.00	3.50	2.75	3.25	3.00	3.00
max	52.50	55.00	90.00	78.00	55.00	15.70	27.50	17.10	35.00	40.00	57.05	52.50
s.d.	NaN	14.56	21.52	21.40	10.45	4.45	5.31	2.87	9.13	9.68	15.91	20.41
Mixed layer temperature : T_ml (deg.C)												
mean	2.83	1.13	2.03	3.80	5.14	8.88	14.70	18.90	16.75	12.12	9.26	5.35
median	2.82	1.05	2.27	4.35	5.12	9.23	14.78	19.05	16.86	11.93	8.76	5.47
min	2.09	0.26	0.10	0.49	2.75	5.15	8.90	16.10	15.44	10.71	6.04	4.77
max	3.60	2.52	4.49	5.64	6.13	11.00	20.15	21.05	18.72	15.89	13.03	5.70
s.d.	NaN	0.80	1.07	1.34	0.52	1.54	2.10	0.82	1.04	1.38	1.47	[illegible]
Mixed layer salinity : S_ml (psu)												
mean	31.76	31.66	32.05	32.61	32.04	31.79	31.53	31.34	31.23	30.88	30.98	31.59
median	31.53	31.74	31.96	32.65	31.81	31.83	31.59	31.39	31.24	30.92	31.07	31.57
min	31.42	31.26	31.50	31.73	30.38	31.37	30.13	30.76	30.61	29.99	29.25	30.15
max	32.55	32.04	33.44	33.99	33.09	32.12	33.03	32.14	31.88	31.83	31.49	32.25
s.d.	NaN	0.28	0.32	0.49	0.52	0.19	0.38	0.21	0.28	0.43	0.47	0.75
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.31	25.35	25.60	25.90	25.31	24.62	23.34	22.25	22.68	23.36	23.92	24.93
median	25.11	25.44	25.57	25.90	25.12	24.69	23.31	22.24	22.69	23.37	24.07	24.91
min	25.01	25.02	25.28	25.44	23.92	24.22	21.01	21.49	22.13	22.01	22.70	23.77
max	26.00	25.67	26.49	26.87	26.06	24.96	24.61	22.99	23.36	24.05	24.70	25.48
s.d.	NaN	0.26	0.20	0.32	0.42	0.23	0.59	0.23	0.33	0.41	0.48	0.60

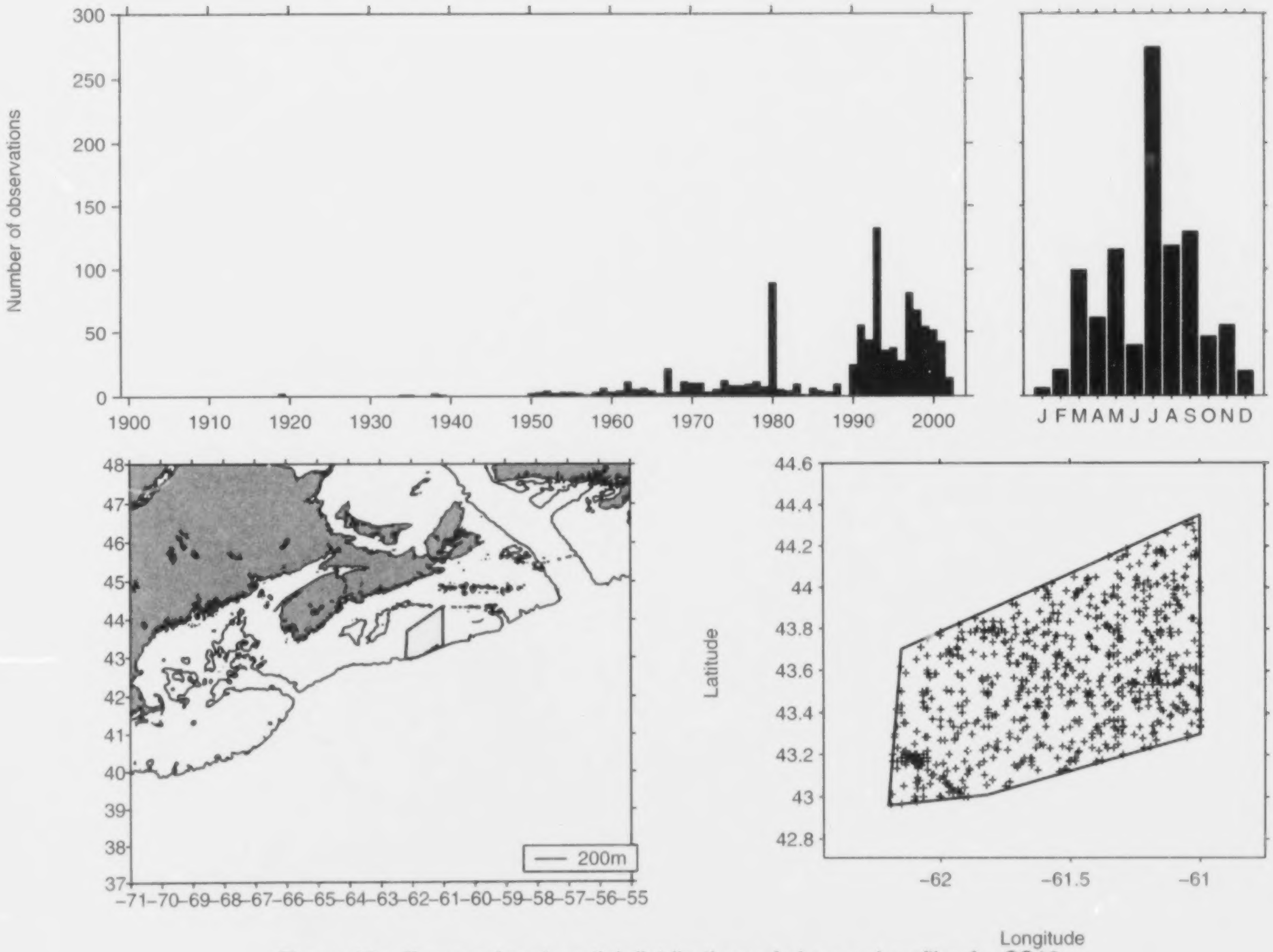

Figure 13a. Temporal and spatial distributions of observed profiles for SS10.

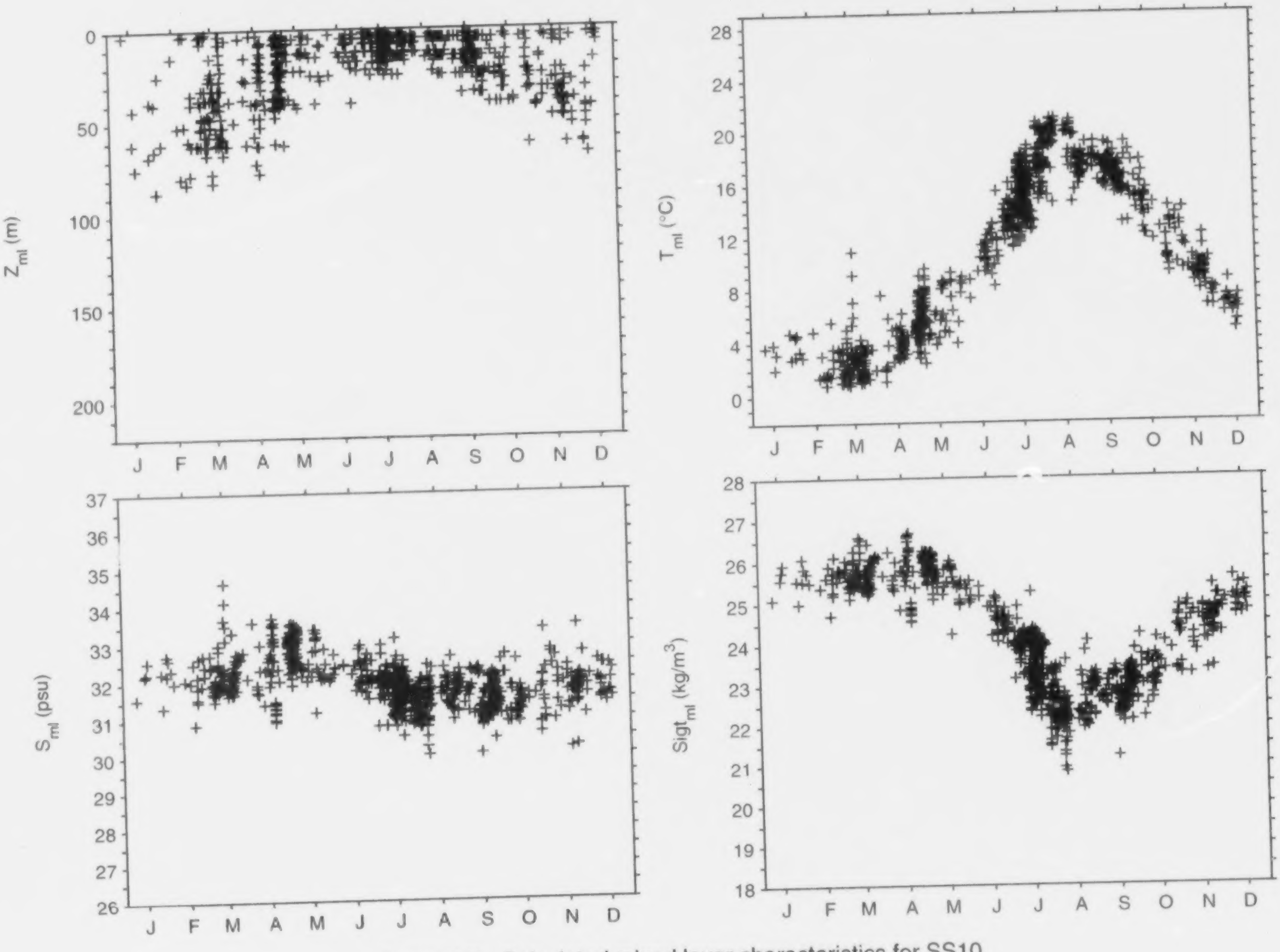

Figure 13b. Calculated mixed layer characteristics for SS10.

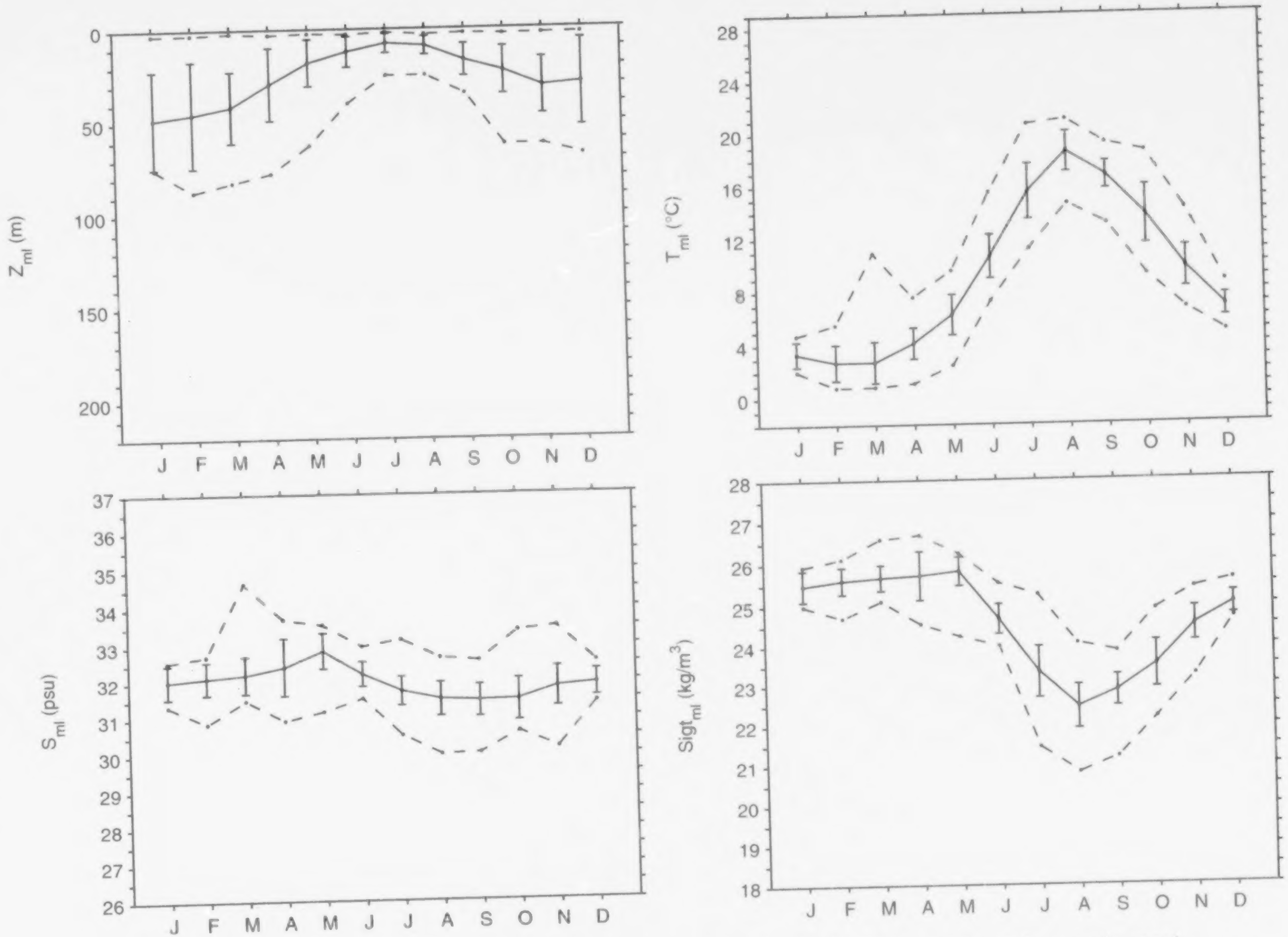

Figure 13c. Monthly statistics of mixed layer characteristics for SS10 (– : mean±sd; –– : min,max).

Table 11. Monthly statistics of mixed layer characteristics for SS10.

Profiles extracted (#) : 1149 Profiles retained (#) : 981 Profiles rejected (%) : 14.6
Mean seabed depth (m) for subregion : 82.4 Mean sounding depth (m) for profiles : 83.2

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	6	20	99	61	115	39	272	120	128	47	55	19
Mixed layer depth : Z_ml (m)												
mean	48.23	45.55	41.57	29.32	17.92	12.19	7.88	9.27	17.11	22.87	31.27	29.53
median	52.25	52.25	47.25	27.80	13.75	8.50	7.50	7.50	17.40	22.50	37.50	32.35
min	2.90	2.75	2.00	3.00	2.40	2.95	2.00	3.25	2.75	3.35	3.15	3.00
max	75.00	87.50	82.50	77.65	62.50	40.00	25.00	25.00	35.00	62.50	62.50	68.10
s.d.	26.32	28.73	19.26	19.53	12.54	8.14	5.18	4.89	8.53	12.69	15.13	23.32
Mixed layer temperature : T_ml (deg.C)												
mean	3.35	2.70	2.70	4.11	6.23	10.59	15.50	18.51	16.71	13.67	9.70	6.77
median	3.37	2.85	2.58	4.11	6.05	10.42	15.48	18.47	16.65	13.85	9.40	6.82
min	2.01	0.79	0.82	1.09	2.43	7.28	11.15	14.54	13.04	9.17	6.59	4.87
max	4.72	5.51	10.86	7.56	9.54	15.44	20.64	20.98	19.20	18.53	14.13	8.65
s.d.	0.94	1.35	1.55	1.16	1.51	1.64	2.10	1.53	1.04	2.22	1.55	0.84
Mixed layer salinity : S_ml (psu)												
mean	32.03	32.12	32.21	32.42	32.86	32.22	31.74	31.50	31.46	31.48	31.82	31.91
median	32.22	32.17	32.11	32.62	32.99	32.17	31.77	31.49	31.44	31.41	31.86	31.91
min	31.34	30.87	31.49	30.94	31.18	31.53	30.53	30.01	30.04	30.60	30.17	31.39
max	32.56	32.73	34.65	33.71	33.56	32.98	33.16	32.66	32.57	33.38	33.48	32.52
s.d.	0.47	0.46	0.52	0.79	0.49	0.34	0.40	0.46	0.44	0.58	0.55	0.37
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.48	25.60	25.67	25.72	25.82	24.67	23.33	22.46	22.86	23.51	24.51	25.01
median	25.55	25.63	25.63	25.89	25.88	24.60	23.31	22.35	22.92	23.39	24.61	25.01
min	24.99	24.70	25.11	24.55	24.24	24.00	21.46	20.82	21.21	22.20	23.24	24.67
max	25.93	26.12	26.59	26.68	26.25	25.53	25.25	24.06	23.86	24.89	25.39	25.59
s.d.	0.37	0.32	0.30	0.58	0.34	0.36	0.65	0.54	0.39	0.59	0.42	0.27

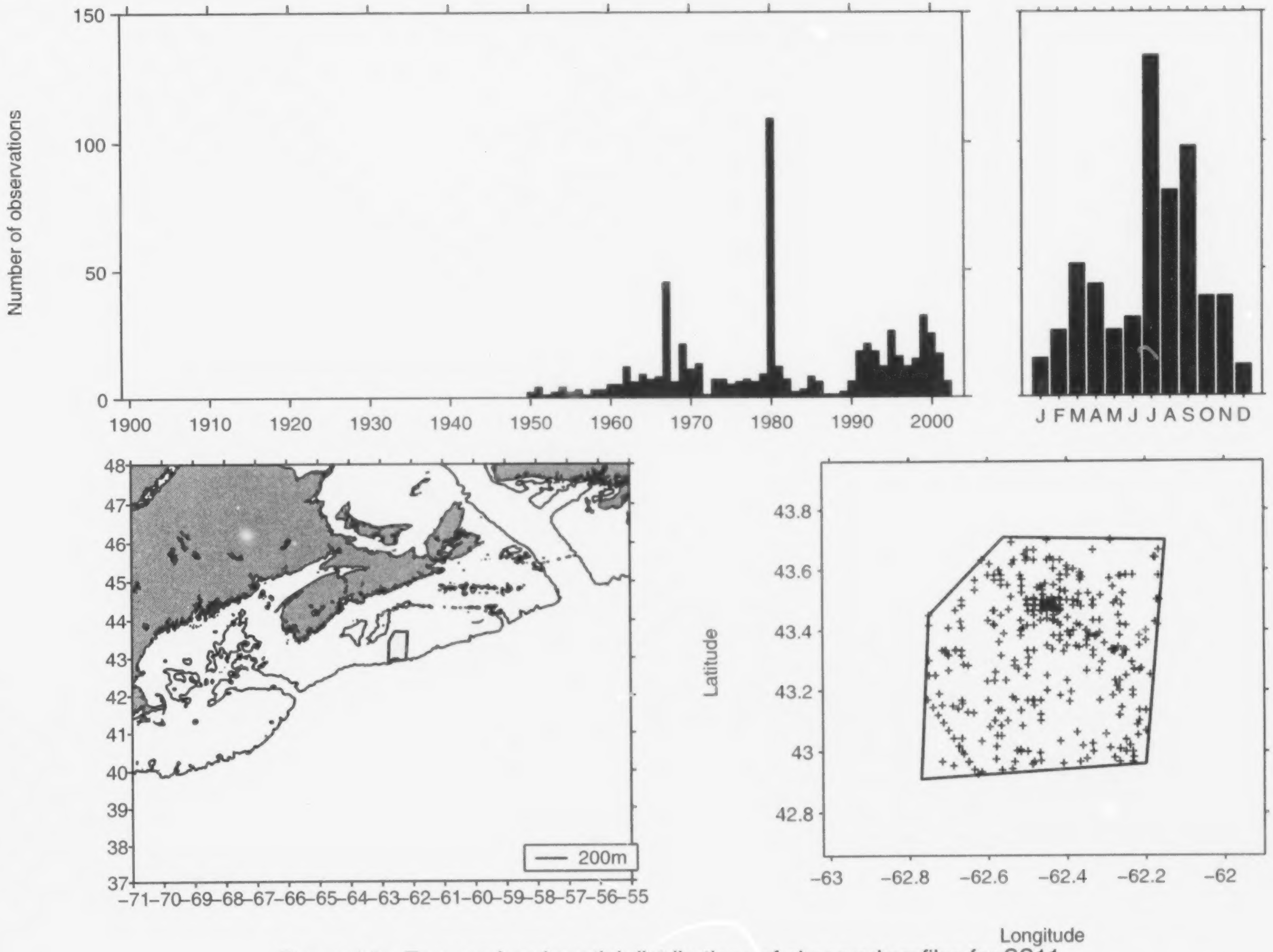

Figure 14a. Temporal and spatial distributions of observed profiles for SS11.

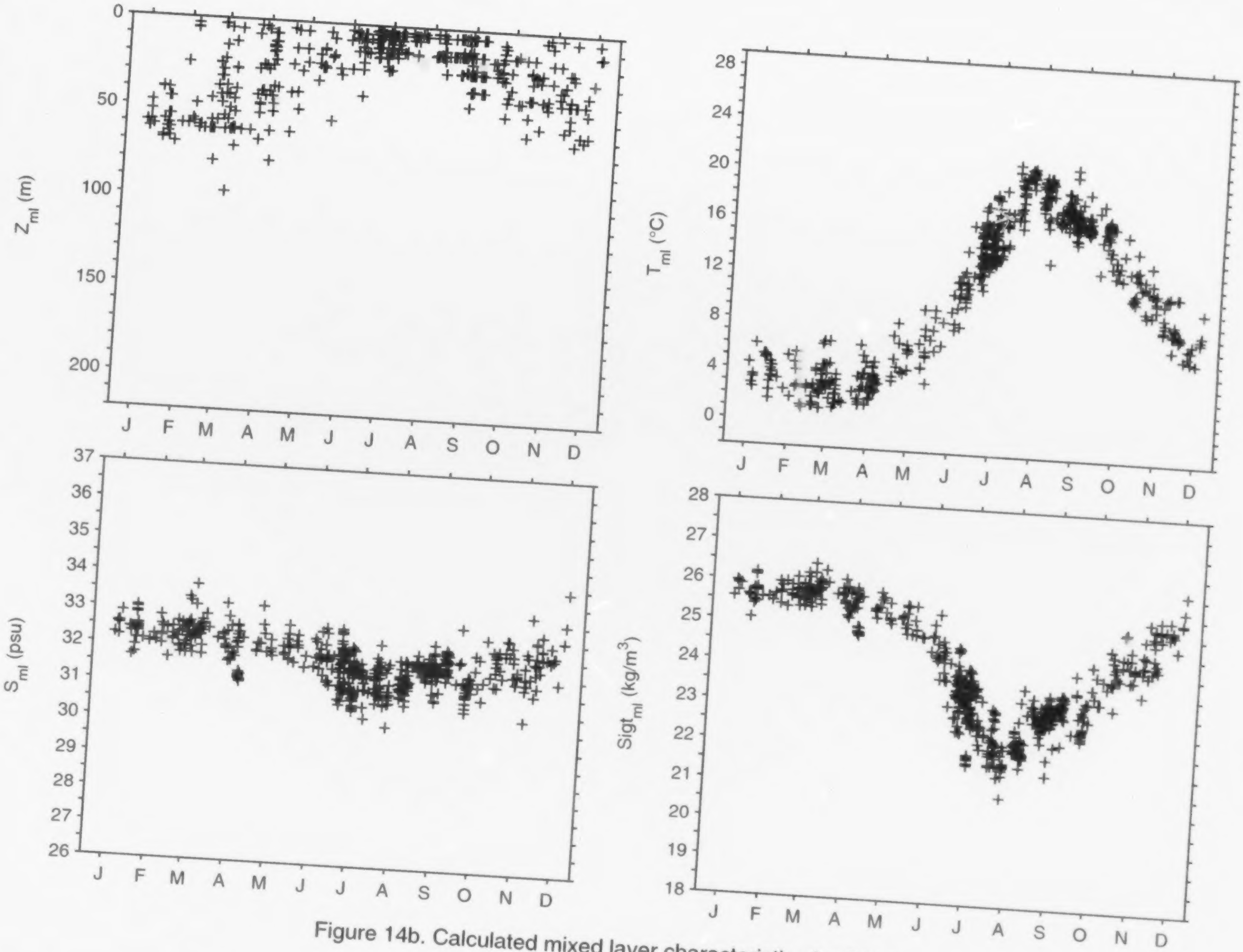

Figure 14b. Calculated mixed layer characteristics for SS11.

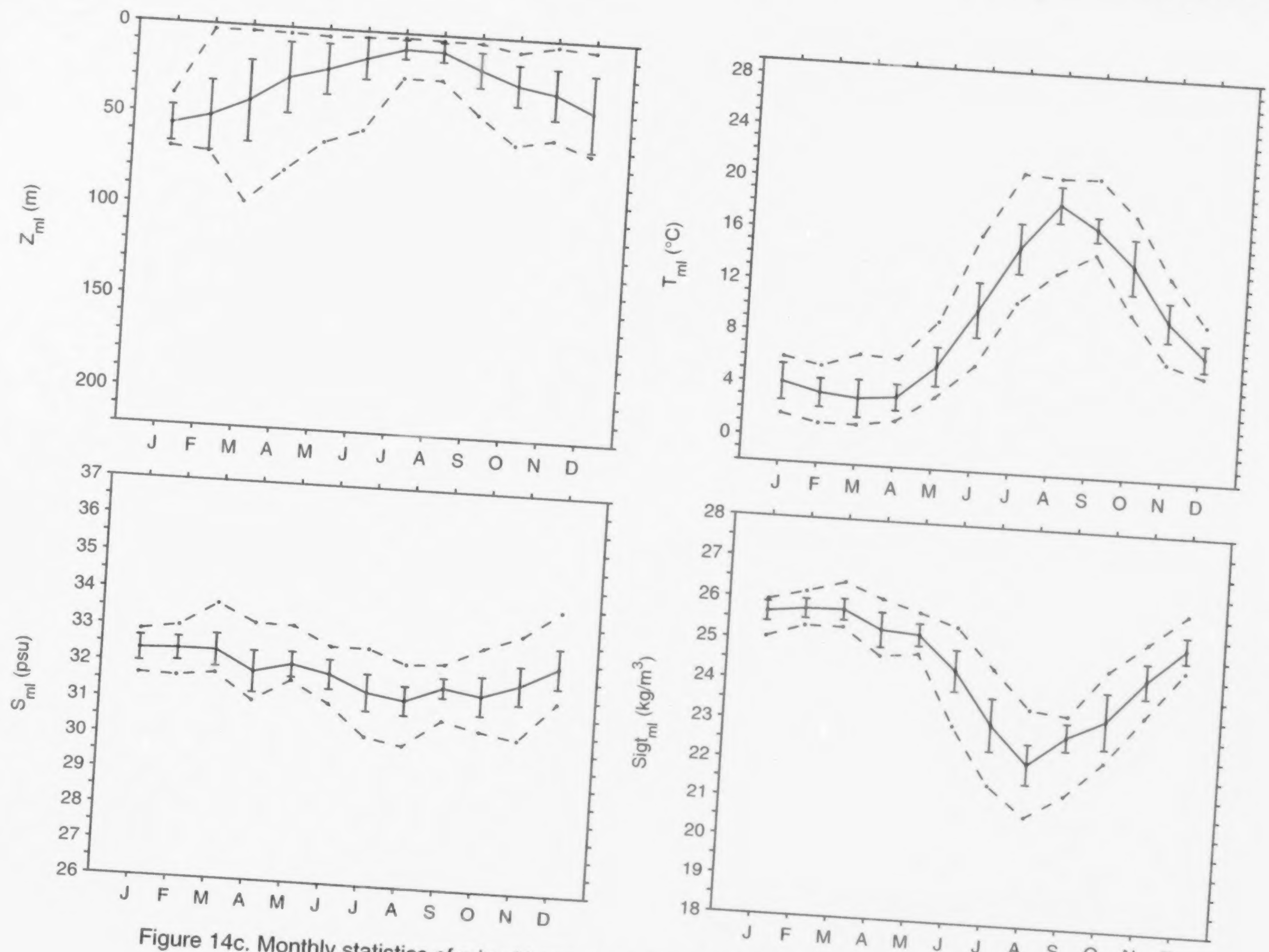

Figure 14c. Monthly statistics of mixed layer characteristics for SS11 (– : mean±sd; –– : min,max).

Table 12. Monthly statistics of mixed layer characteristics for SS11.

Profiles extracted (#) : 650 Profiles retained (#) : 596 Profiles rejected (%) : 8.3
Mean seabed depth (m) for subregion : 101.5 Mean sounding depth (m) for profiles : 93.9

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	15	26	52	44	26	31	133	79	99	40	35	16
Mixed layer depth : Z_ml (m)												
mean	56.01	50.87	41.75	27.97	22.12	15.00	8.86	9.27	17.95	25.74	29.57	39.06
median	59.00	59.25	43.00	25.00	22.70	12.55	7.50	5.00	15.00	22.75	29.25	40.00
min	39.50	3.25	3.00	3.25	4.00	3.50	2.50	3.00	3.25	7.30	3.25	5.00
max	68.55	70.50	97.50	79.35	62.50	55.00	25.00	25.00	43.40	58.75	55.00	62.50
s.d.	9.81	19.27	22.64	19.74	14.16	11.61	5.29	5.27	9.84	11.56	14.19	21.12
Mixed layer temperature : T_ml (deg.C)												
mean	4.04	3.32	3.03	3.27	5.79	10.36	15.30	18.86	17.08	14.35	10.21	7.56
median	4.44	3.38	2.89	3.29	5.83	10.54	15.18	19.39	16.86	14.52	10.58	7.78
min	1.65	1.02	1.03	1.46	3.41	6.03	11.10	13.50	15.09	10.65	6.96	6.05
max	5.98	5.40	6.40	6.23	9.27	16.10	21.12	20.90	20.99	18.21	13.57	10.03
s.d.	1.40	1.09	1.44	1.00	1.50	2.14	1.94	1.42	0.94	2.12	1.52	1.01
Mixed layer salinity : S_ml (psu)												
mean	32.36	32.40	32.40	31.86	32.11	31.89	31.44	31.28	31.69	31.52	31.86	32.38
median	32.43	32.37	32.35	31.96	32.05	31.86	31.51	31.25	31.67	31.36	31.92	32.33
min	31.68	31.66	31.78	31.07	31.67	31.09	30.21	30.01	30.78	30.53	30.34	31.41
max	32.88	33.04	33.68	33.19	33.17	32.66	32.65	32.27	32.34	32.83	33.21	33.92
s.d.	0.35	0.33	0.44	0.57	0.34	0.40	0.51	0.40	0.27	0.54	0.53	0.54
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.67	25.77	25.80	25.35	25.28	24.44	23.15	22.21	22.95	23.40	24.45	25.27
median	25.63	25.75	25.79	25.43	25.30	24.42	23.29	22.09	22.95	23.31	24.36	25.21
min	25.05	25.36	25.37	24.71	24.81	23.06	21.61	20.83	21.44	22.36	23.54	24.71
max	25.96	26.20	26.46	26.10	25.82	25.52	24.54	23.58	23.47	24.65	25.37	26.10
s.d.	0.24	0.23	0.26	0.42	0.27	0.51	0.66	0.52	0.34	0.70	0.44	0.31

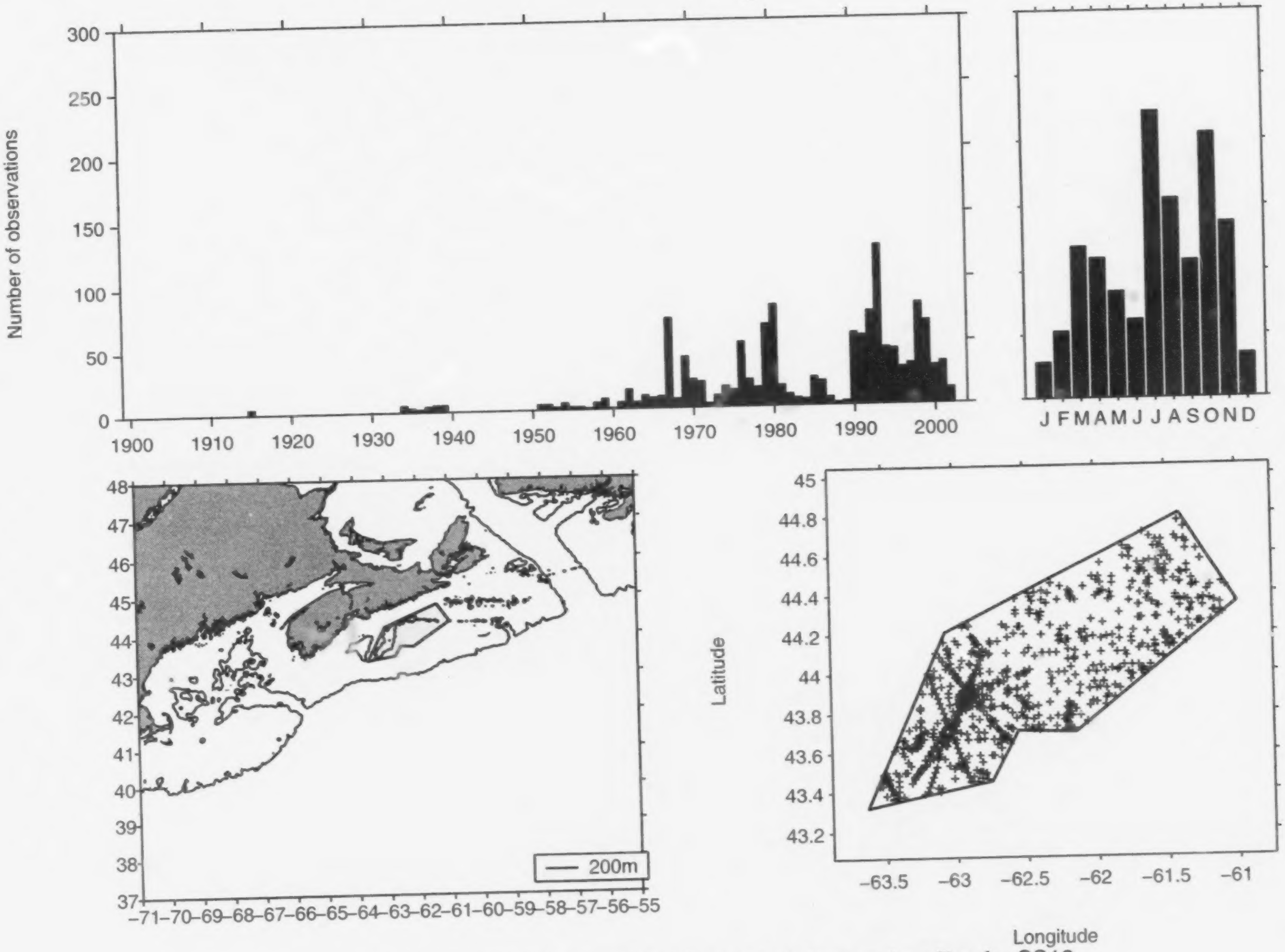

Figure 15a. Temporal and spatial distributions of observed profiles for SS12.

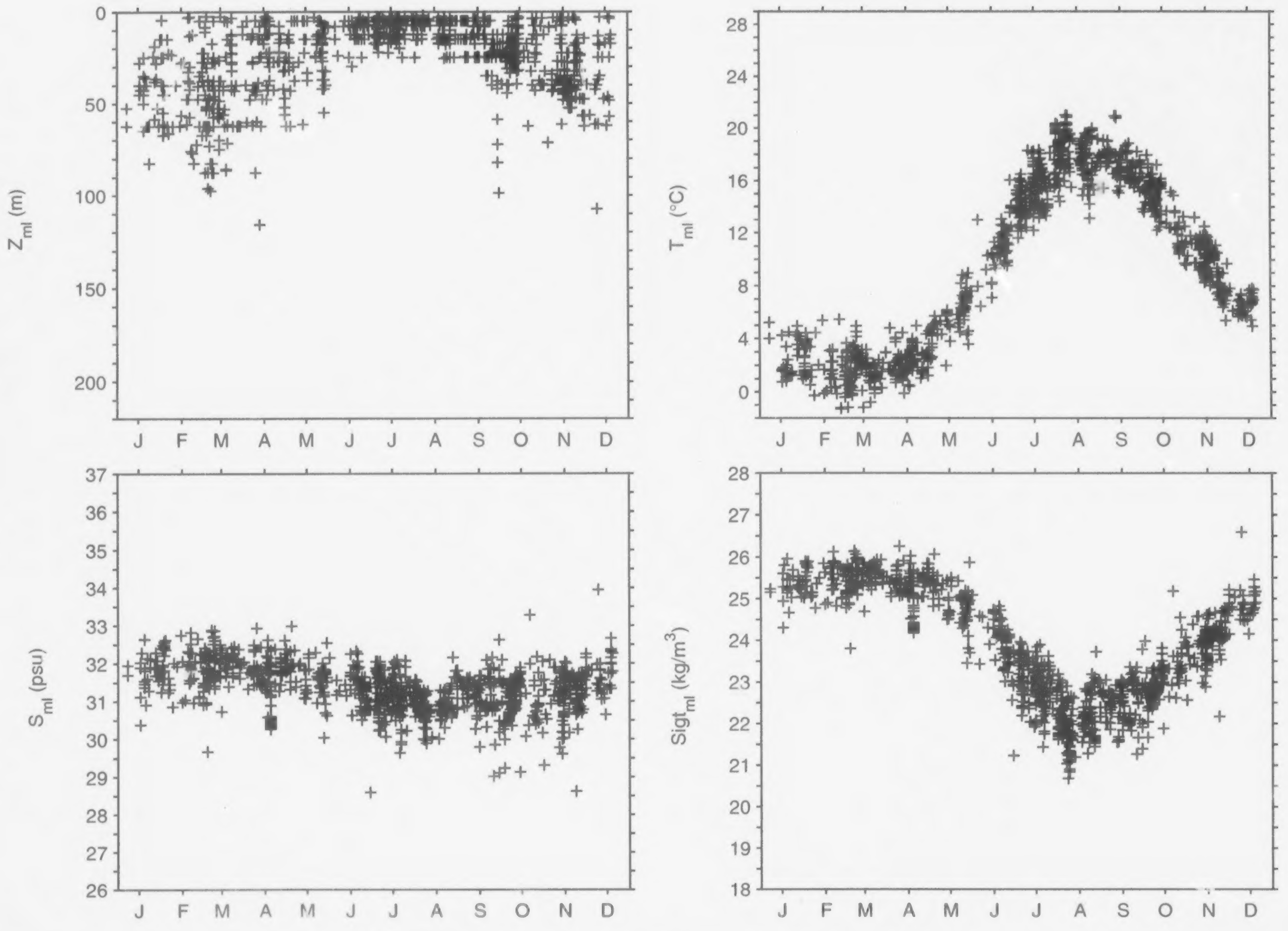

Figure 15b. Calculated mixed layer characteristics for SS12.

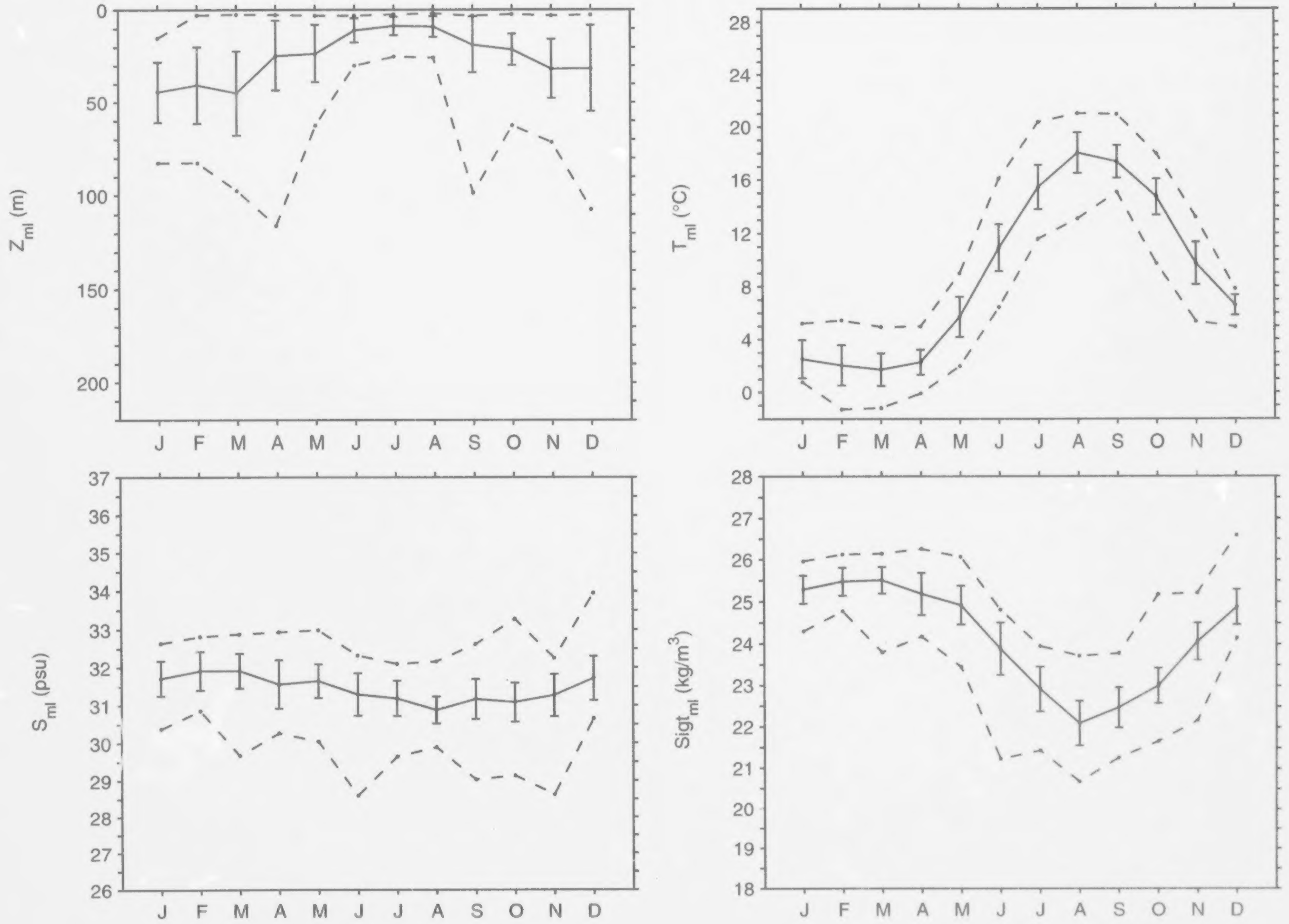

Figure 15c. Monthly statistics of mixed layer characteristics for SS12 (– : mean±sd; –– : min,max).

Table 13. Monthly statistics of mixed layer characteristics for SS12.

Profiles extracted (#) : 1623   Profiles retained (#) : 1317   Profiles rejected (%) : 18.9
Mean seabed depth (m) for subregion : 157.4   Mean sounding depth (m) for profiles : 184.6

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	28	53	119	110	84	62	220	155	109	205	138	34
Mixed layer depth : Z_ml (m)												
mean	44.35	40.56	44.90	24.54	23.41	10.95	8.53	8.89	18.61	21.18	31.72	31.49
median	42.50	40.00	42.50	21.98	19.98	7.95	7.50	7.00	15.00	22.00	34.92	25.00
min	15.00	2.85	2.50	2.75	3.15	3.15	2.50	1.90	3.25	2.45	3.15	2.75
max	82.50	82.50	97.50	116.00	62.50	29.90	25.00	25.50	98.70	62.50	71.50	107.45
s.d.	16.42	20.85	22.86	18.81	15.52	6.40	4.91	5.47	15.01	8.40	16.09	23.30
Mixed layer temperature : T_ml (deg.C)												
mean	2.52	2.04	1.71	2.27	5.71	10.90	15.45	18.04	17.38	14.72	9.74	6.60
median	1.93	1.89	1.62	2.21	5.79	10.75	15.36	18.12	17.37	15.07	10.00	6.69
min	0.77	-1.29	-1.20	-0.11	1.98	6.44	11.60	13.10	15.07	9.73	5.38	4.95
max	5.21	5.45	4.95	4.98	8.97	16.07	20.36	21.02	20.96	17.98	13.20	7.83
s.d.	1.43	1.52	1.23	0.95	1.52	1.76	1.67	1.54	1.24	1.36	1.61	0.76
Mixed layer salinity : S_ml (psu)												
mean	31.71	31.91	31.92	31.56	31.64	31.29	31.18	30.88	31.16	31.08	31.26	31.72
median	31.77	31.94	31.93	31.73	31.75	31.30	31.17	30.86	31.29	30.95	31.41	31.68
min	30.38	30.86	29.67	30.27	30.04	28.59	29.64	29.89	29.02	29.13	28.62	30.64
max	32.64	32.82	32.88	32.93	32.98	32.32	32.09	32.16	32.62	33.28	32.25	33.95
s.d.	0.46	0.51	0.46	0.64	0.45	0.56	0.47	0.36	0.53	0.52	0.56	0.58
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.29	25.48	25.51	25.19	24.92	23.89	22.92	22.10	22.48	23.00	24.06	24.88
median	25.29	25.54	25.53	25.35	24.92	23.99	22.96	22.06	22.51	23.00	24.10	24.82
min	24.30	24.78	23.80	24.18	23.45	21.23	21.44	20.68	21.27	21.66	22.17	24.15
max	25.96	26.13	26.15	26.26	26.07	24.82	23.96	23.72	23.78	25.18	25.21	26.59
s.d.	0.33	0.33	0.32	0.50	0.46	0.63	0.54	0.54	0.48	0.42	0.45	0.42

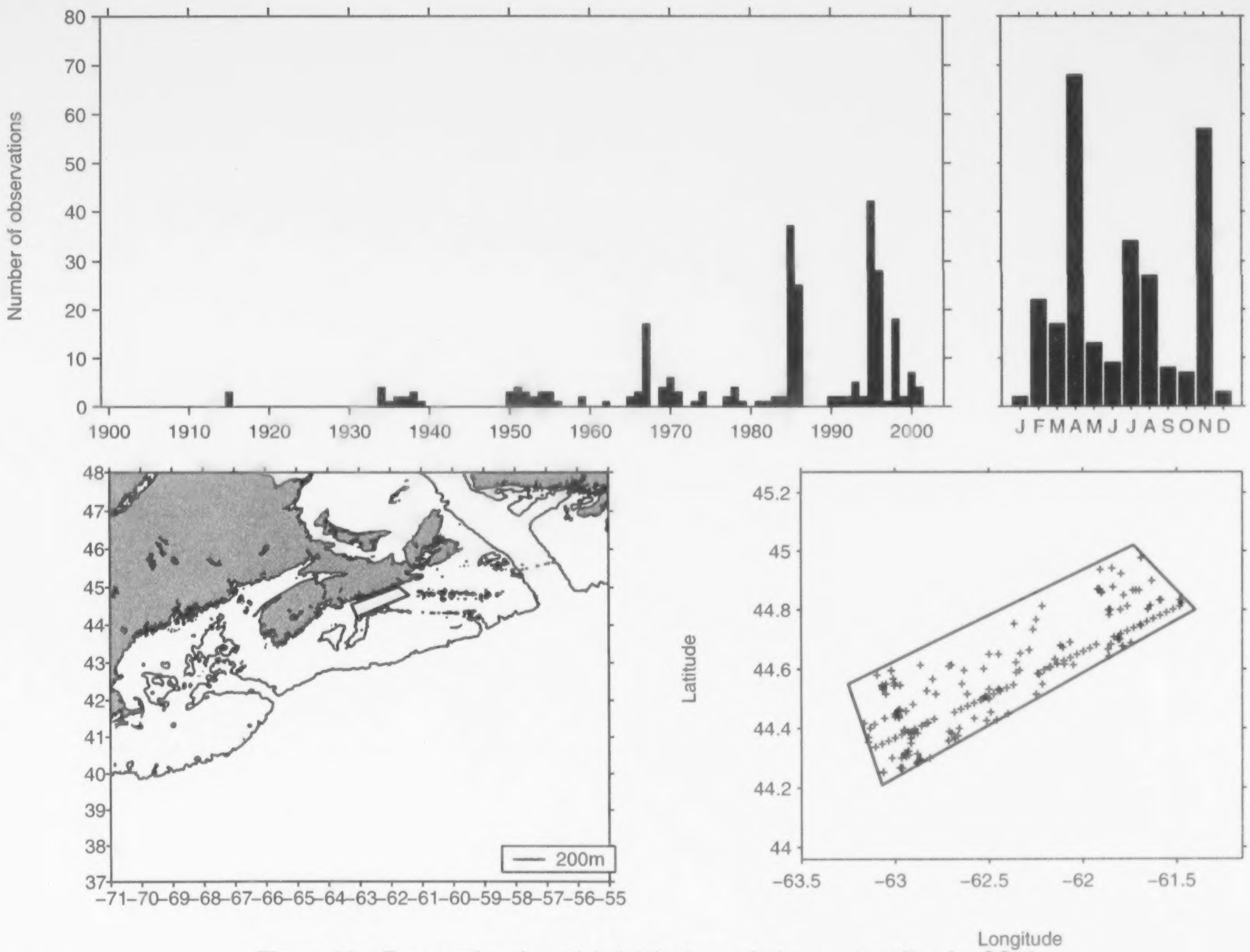

Figure 16a. Temporal and spatial distributions of observed profiles for SS13.

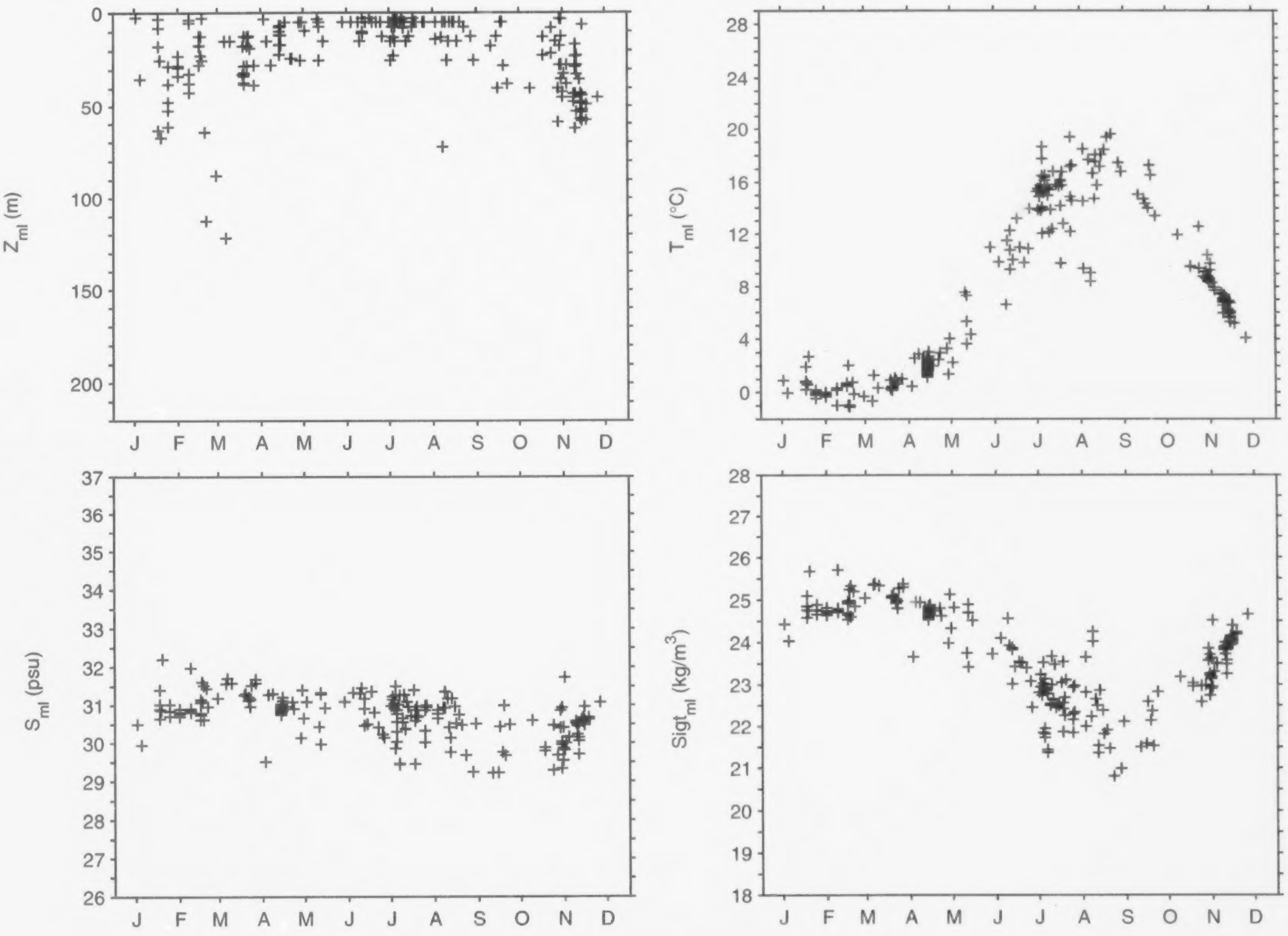

Figure 16b. Calculated mixed layer characteristics for SS13.

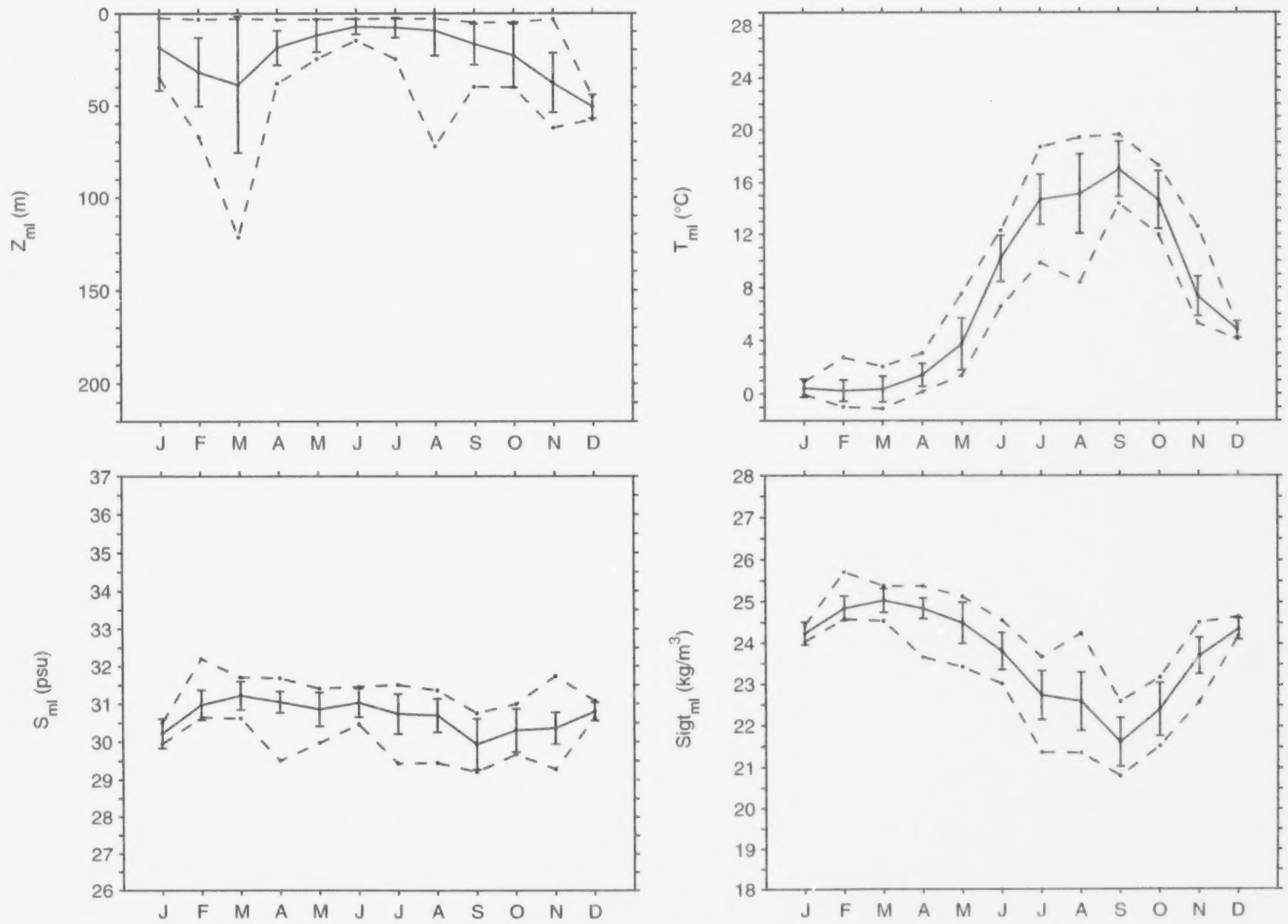

Figure 16c. Monthly statistics of mixed layer characteristics for SS13 (– : mean±sd; -- : min,max).

Table 14. Monthly statistics of mixed layer characteristics for SS13.

Profiles extracted (#) : 297 Profiles retained (#) : 267 Profiles rejected (%) : 10.1
Mean seabed depth (m) for subregion : 107.9 Mean sounding depth (m) for profiles : 118.5

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	2	22	17	68	13	8	35	27	8	5	59	3
Mixed layer depth : Z_ml (m)												
mean	18.75	31.91	38.72	18.84	12.19	7.38	7.86	9.54	16.88	23.07	37.80	50.60
median	18.75	28.57	22.50	16.85	7.45	5.00	5.00	5.00	13.75	27.85	42.90	49.00
min	2.50	3.35	3.00	3.50	3.50	3.00	3.00	3.00	5.00	5.00	3.25	45.00
max	35.00	67.50	121.70	38.15	25.00	15.00	25.00	72.50	39.85	40.00	62.50	57.80
s.d.	NaN	18.57	37.10	9.36	9.03	4.14	5.50	13.52	11.10	17.11	16.09	NaN
Mixed layer temperature : T_ml (deg.C)												
mean	0.43	0.24	0.36	1.41	3.73	10.18	14.67	15.10	16.99	14.64	7.35	4.83
median	0.43	0.08	0.50	1.36	3.30	10.43	15.21	15.80	17.16	14.00	6.94	5.18
min	-0.05	-0.97	-1.10	0.16	1.37	6.60	9.85	8.40	14.37	11.96	5.29	4.10
max	0.90	2.70	2.05	3.05	7.55	12.27	18.67	19.40	19.62	17.30	12.58	5.21
s.d.	NaN	0.79	0.95	0.86	1.96	1.72	1.93	3.04	2.10	2.23	1.48	NaN
Mixed layer salinity : S_ml (psu)												
mean	30.23	30.97	31.22	31.05	30.86	31.03	30.74	30.70	29.94	30.30	30.36	30.79
median	30.23	30.85	31.19	31.02	30.97	31.13	30.81	30.87	30.06	30.49	30.52	30.68
min	29.95	30.64	30.62	29.51	29.97	30.46	29.44	29.45	29.21	29.67	29.29	30.63
max	30.50	32.20	31.70	31.68	31.40	31.45	31.50	31.35	30.76	30.99	31.73	31.07
s.d.	NaN	0.39	0.37	0.28	0.44	0.38	0.52	0.44	0.67	0.57	0.42	NaN
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	24.23	24.84	25.03	24.84	24.50	23.81	22.74	22.59	21.62	22.41	23.71	24.36
median	24.23	24.75	25.04	24.82	24.70	23.85	22.85	22.50	21.54	22.37	23.89	24.23
min	24.04	24.58	24.54	23.66	23.42	23.02	21.37	21.37	20.81	21.53	22.58	24.19
max	24.43	25.71	25.38	25.38	25.13	24.56	23.67	24.25	22.59	23.18	24.52	24.65
s.d.	NaN	0.29	0.29	0.25	0.50	0.45	0.59	0.70	0.58	0.63	0.44	NaN

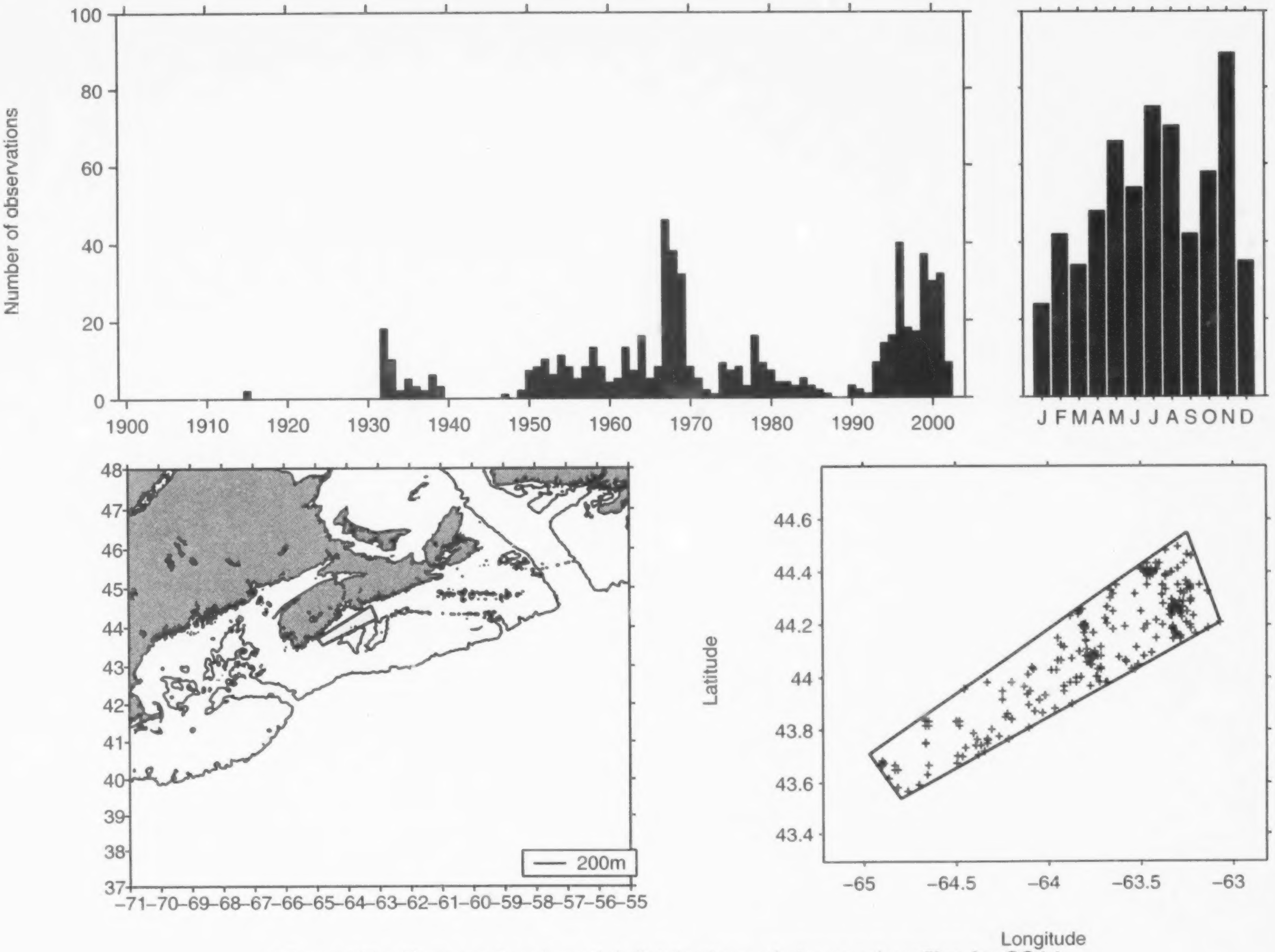

Figure 17a. Temporal and spatial distributions of observed profiles for SS14.

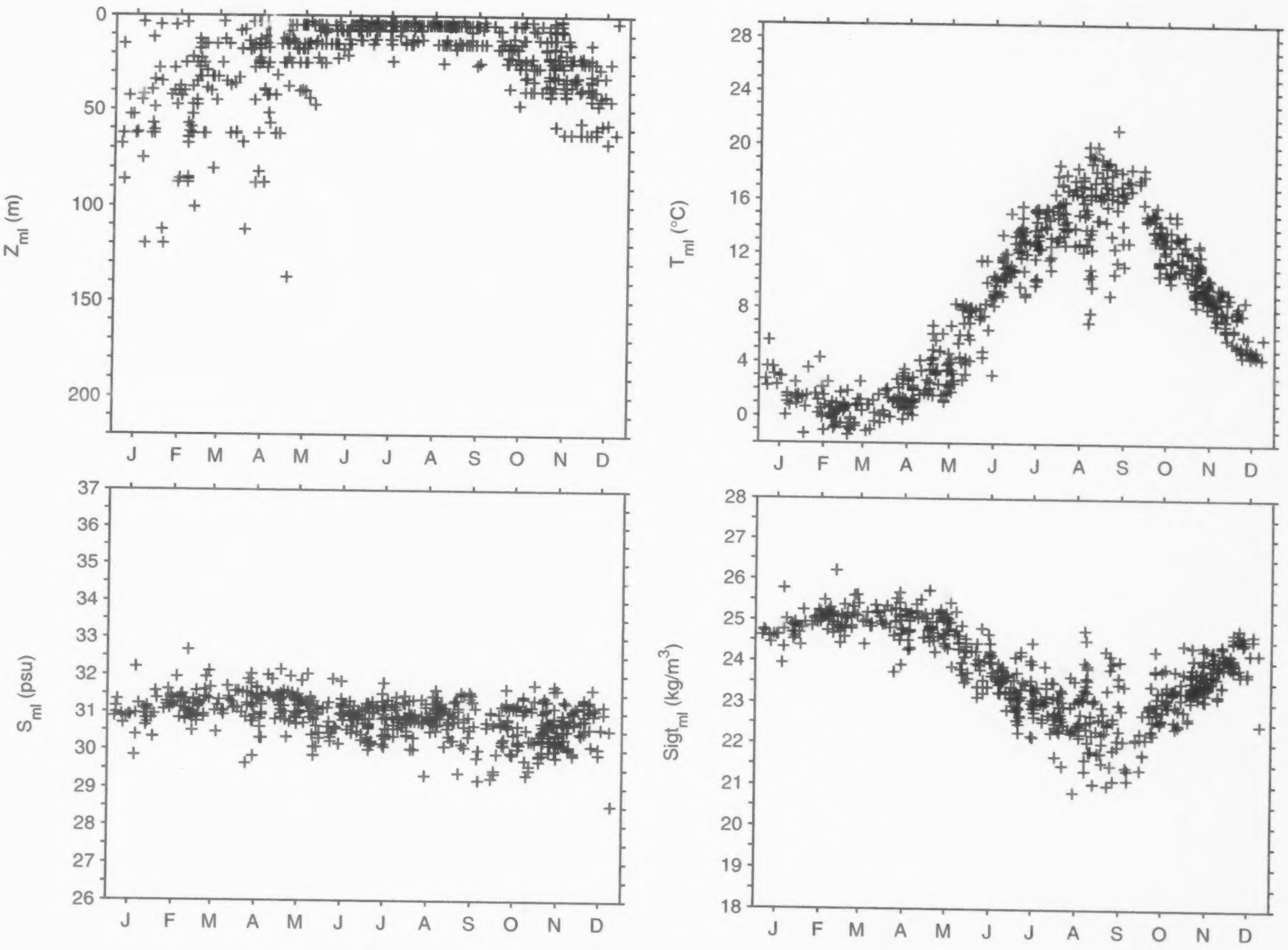

Figure 17b. Calculated mixed layer characteristics for SS14.

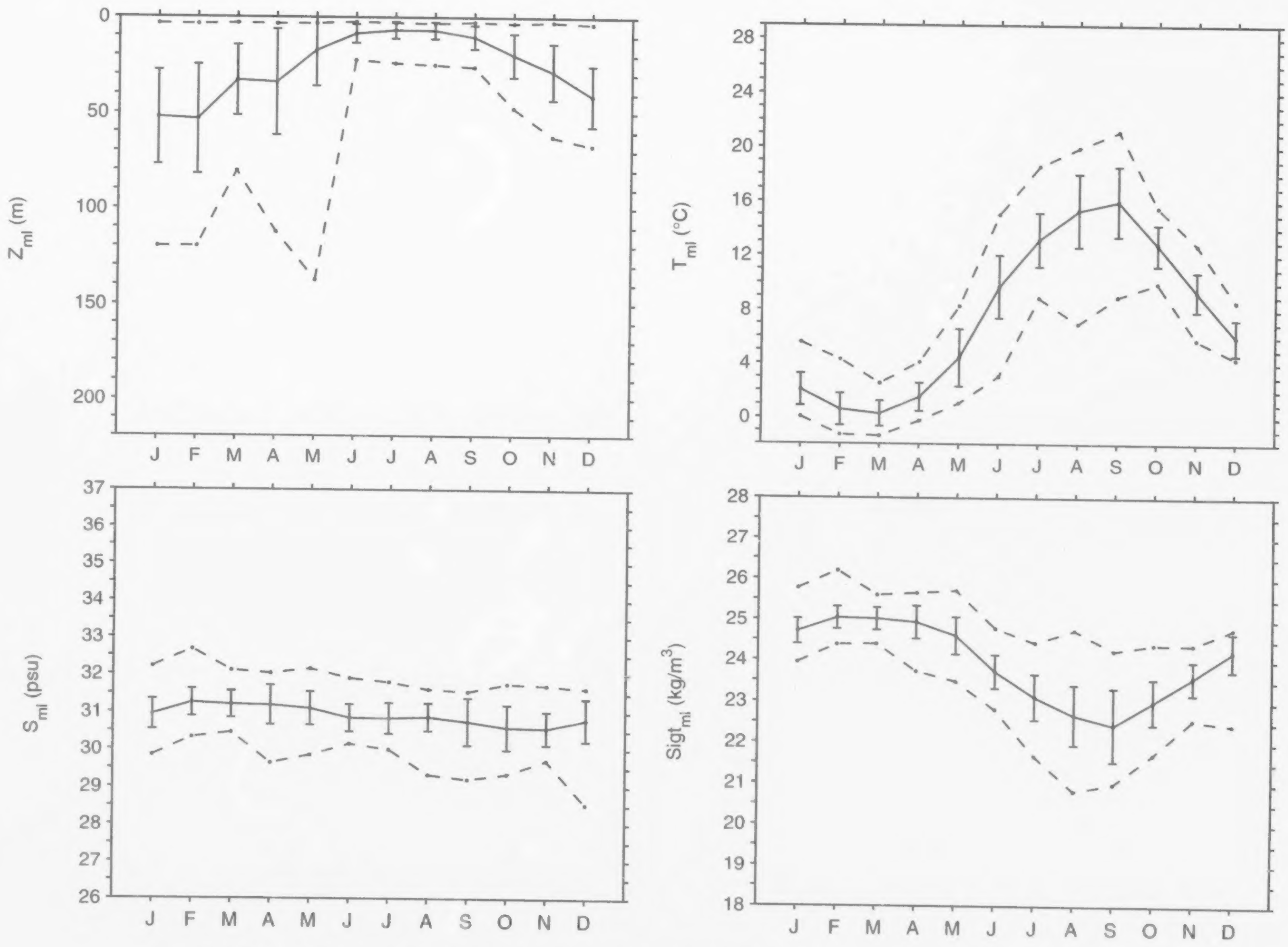

Figure 17c. Monthly statistics of mixed layer characteristics for SS14 (– : mean±sd; –– : min,max).

Table 15. Monthly statistics of mixed layer characteristics for SS14.

Profiles extracted (#) : 804 Profiles retained (#) : 637 Profiles rejected (%) : 20.8
Mean seabed depth (m) for subregion : 130.4 Mean sounding depth (m) for profiles : 129.6

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	24	38	38	48	66	54	75	70	39	61	89	35
Mixed layer depth : Z_ml (m)												
mean	52.39	53.37	33.00	33.94	17.30	8.60	6.84	6.99	10.34	19.82	28.44	41.13
median	55.05	47.38	32.50	25.00	15.00	7.50	5.00	5.00	7.75	17.50	27.50	40.00
min	3.55	3.75	3.25	3.50	3.30	2.50	3.00	3.30	2.50	3.25	2.50	3.60
max	120.00	120.00	80.50	112.50	137.50	22.50	24.00	25.00	26.00	47.50	62.50	67.25
s.d.	24.65	28.53	18.39	27.65	18.57	4.84	4.32	4.33	6.11	11.27	14.68	15.90
Mixed layer temperature : T_ml (deg.C)												
mean	2.06	0.61	0.30	1.55	4.46	9.71	13.17	15.34	16.02	12.77	9.36	6.01
median	1.59	0.43	0.40	1.31	4.06	10.15	13.08	15.90	16.68	13.04	9.23	5.38
min	0.06	-1.30	-1.39	-0.22	1.09	3.08	8.90	6.99	9.00	9.96	5.81	4.40
max	5.57	4.30	2.55	4.13	8.31	15.05	18.61	19.95	21.15	15.56	12.77	8.63
s.d.	1.19	1.19	0.95	1.04	2.13	2.31	1.99	2.71	2.61	1.53	1.44	1.32
Mixed layer salinity : S_ml (psu)												
mean	30.94	31.26	31.21	31.19	31.11	30.85	30.84	30.87	30.75	30.59	30.57	30.80
median	30.94	31.26	31.20	31.27	31.18	30.91	30.87	30.91	30.84	30.67	30.63	30.92
min	29.84	30.33	30.46	29.64	29.85	30.15	30.00	29.32	29.20	29.34	29.71	28.53
max	32.21	32.67	32.11	32.03	32.15	31.90	31.80	31.61	31.55	31.75	31.71	31.63
s.d.	0.41	0.36	0.35	0.52	0.44	0.36	0.41	0.37	0.63	0.60	0.45	0.57
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	24.71	25.05	25.03	24.95	24.62	23.73	23.12	22.69	22.45	23.01	23.59	24.22
median	24.69	25.05	25.04	25.01	24.64	23.66	23.06	22.58	22.27	23.00	23.46	24.41
min	23.94	24.38	24.40	23.73	23.49	22.82	21.68	20.83	21.00	21.73	22.57	22.46
max	25.77	26.20	25.61	25.67	25.72	24.80	24.45	24.75	24.25	24.40	24.39	24.79
s.d.	0.31	0.28	0.28	0.41	0.46	0.41	0.55	0.73	0.89	0.55	0.40	0.47

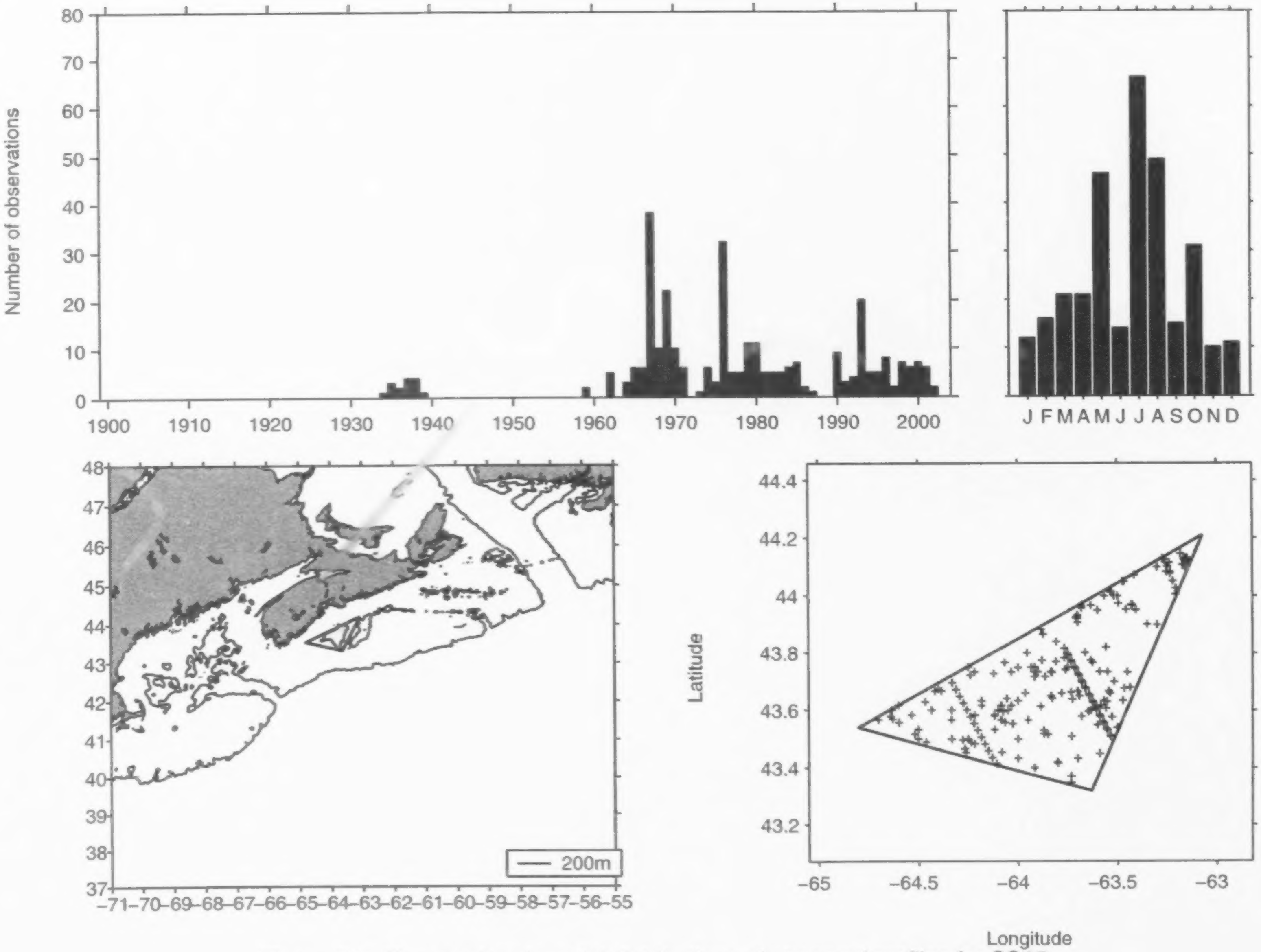

Figure 18a. Temporal and spatial distributions of observed profiles for SS15.

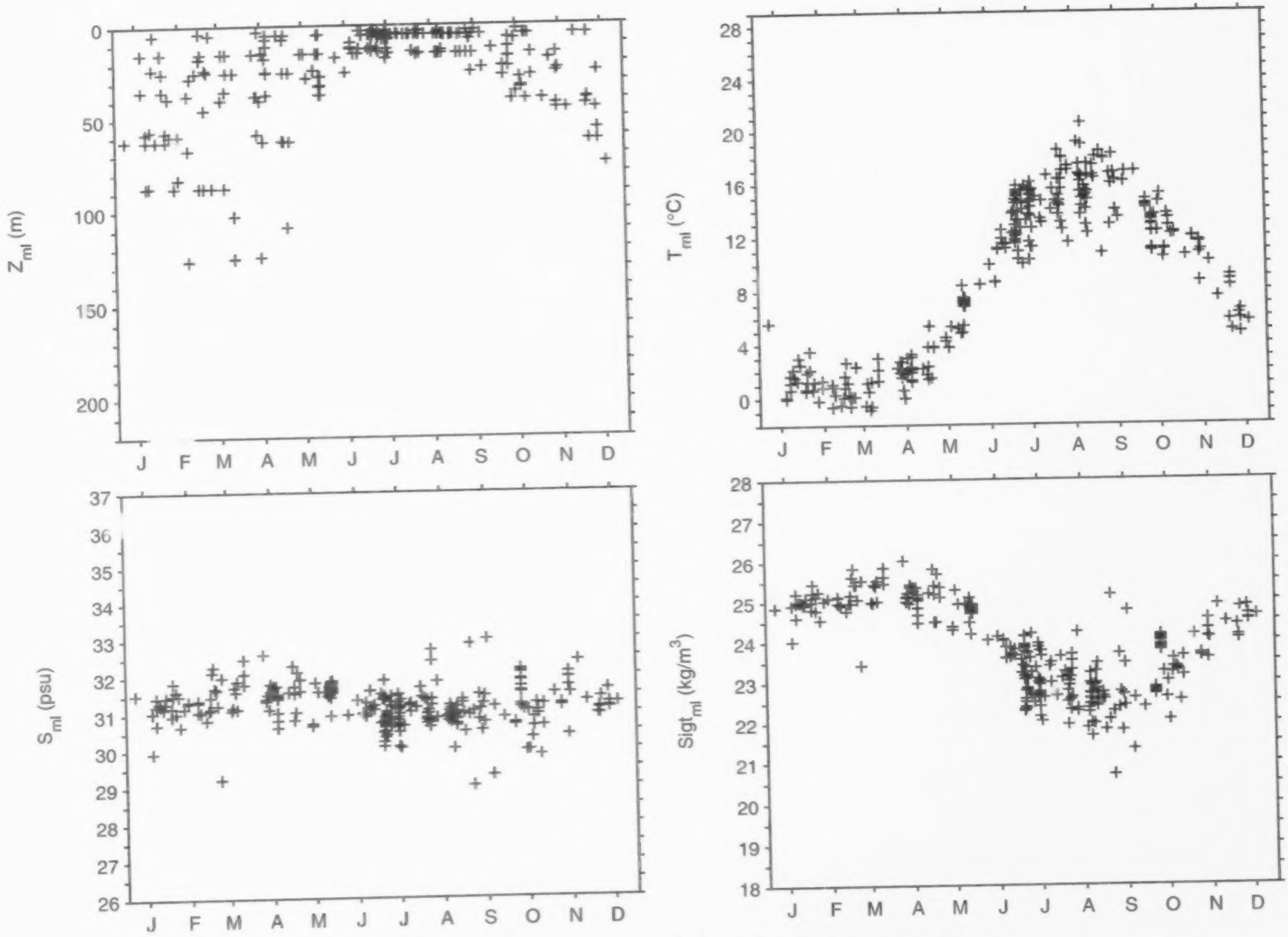

Figure 18b. Calculated mixed layer characteristics for SS15.

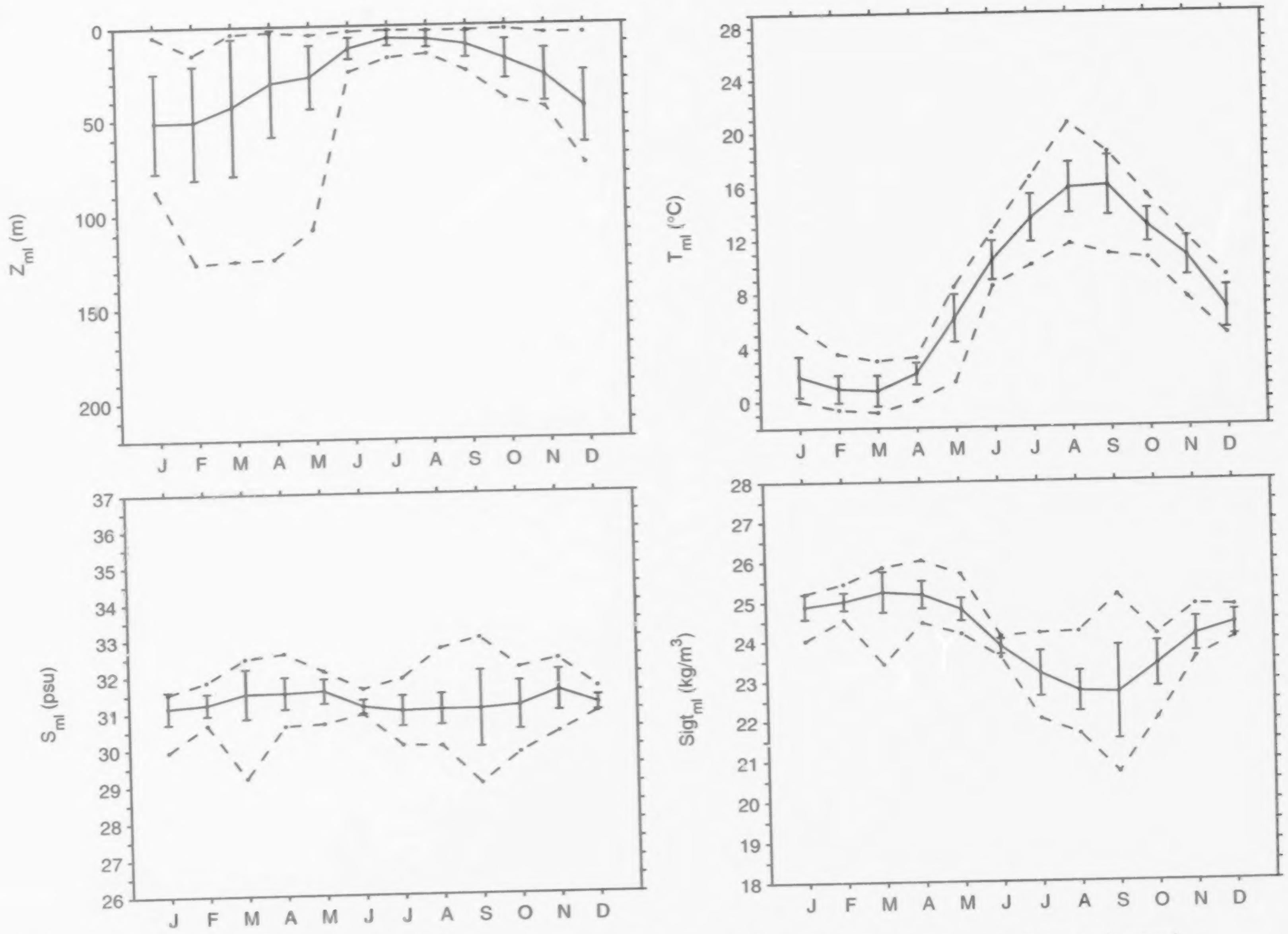

Figure 18c. Monthly statistics of mixed layer characteristics for SS15 (– : mean±sd; –– : min,max).

Table 16. Monthly statistics of mixed layer characteristics for SS15.

Profiles extracted (#) : 362 Profiles retained (#) : 312 Profiles rejected (%) : 13.8
Mean seabed depth (m) for subregion : 187.5 Mean sounding depth (m) for profiles : 183.9

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	12	16	21	21	46	14	66	49	15	31	10	11
Mixed layer depth : Z_ml (m)												
mean	51.43	51.34	43.16	30.70	27.60	12.22	6.83	7.53	10.64	18.81	27.68	44.84
median	60.17	48.02	25.00	24.55	27.05	12.40	5.00	5.00	7.50	16.90	24.25	43.00
min	5.00	15.00	3.90	3.25	4.80	3.00	2.50	3.00	2.90	2.50	4.90	5.00
max	87.50	126.40	125.00	124.20	108.50	25.00	17.50	15.50	25.00	40.00	45.00	75.00
s.d.	26.45	30.23	36.55	28.69	17.16	5.83	4.17	4.49	7.12	10.67	14.36	19.33
Mixed layer temperature : T_ml (deg.C)												
mean	1.85	0.92	0.77	2.03	6.12	10.39	13.56	15.80	15.95	12.94	10.60	6.76
median	1.62	0.83	0.78	2.12	7.13	11.13	13.80	15.60	16.75	12.98	10.91	6.23
min	0.00	-0.64	-0.85	0.01	1.38	8.49	10.03	11.60	10.80	10.46	7.50	4.80
max	5.64	3.52	2.99	3.25	8.40	12.52	16.60	20.60	18.42	15.20	12.02	9.10
s.d.	1.52	1.03	1.14	0.81	1.74	1.47	1.78	1.87	2.20	1.26	1.48	1.57
Mixed layer salinity : S_ml (psu)												
mean	31.15	31.23	31.51	31.52	31.56	31.13	31.01	31.04	31.04	31.12	31.52	31.16
median	31.27	31.24	31.65	31.52	31.64	31.10	31.05	30.97	31.04	31.07	31.52	31.11
min	29.94	30.66	29.20	30.62	30.67	30.92	30.05	30.02	29.00	29.83	30.39	30.94
max	31.53	31.84	32.46	32.60	32.11	31.61	31.89	32.70	32.99	32.16	32.39	31.61
s.d.	0.44	0.30	0.68	0.43	0.33	0.19	0.42	0.42	1.04	0.66	0.56	0.21
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	24.88	25.01	25.24	25.18	24.81	23.86	23.18	22.73	22.70	23.40	24.13	24.41
median	24.95	25.05	25.43	25.17	24.80	23.86	23.11	22.71	22.43	23.35	24.12	24.50
min	24.02	24.55	23.42	24.46	24.18	23.59	22.04	21.66	20.70	22.06	23.56	24.04
max	25.21	25.45	25.86	26.03	25.69	24.12	24.19	24.22	25.15	24.14	24.89	24.85
s.d.	0.31	0.22	0.51	0.34	0.29	0.19	0.56	0.50	1.17	0.56	0.43	0.31

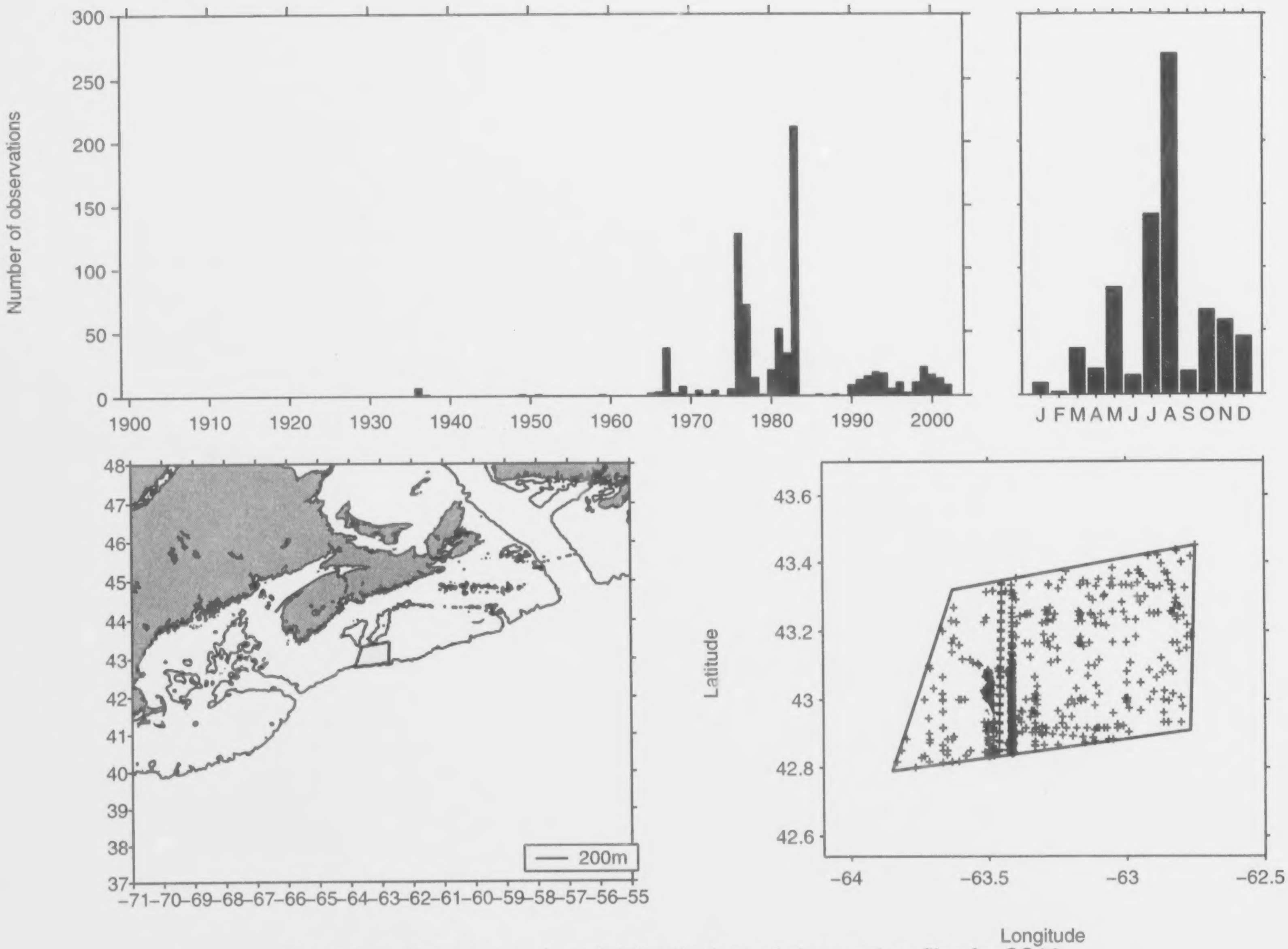

Figure 19a. Temporal and spatial distributions of observed profiles for SS16.

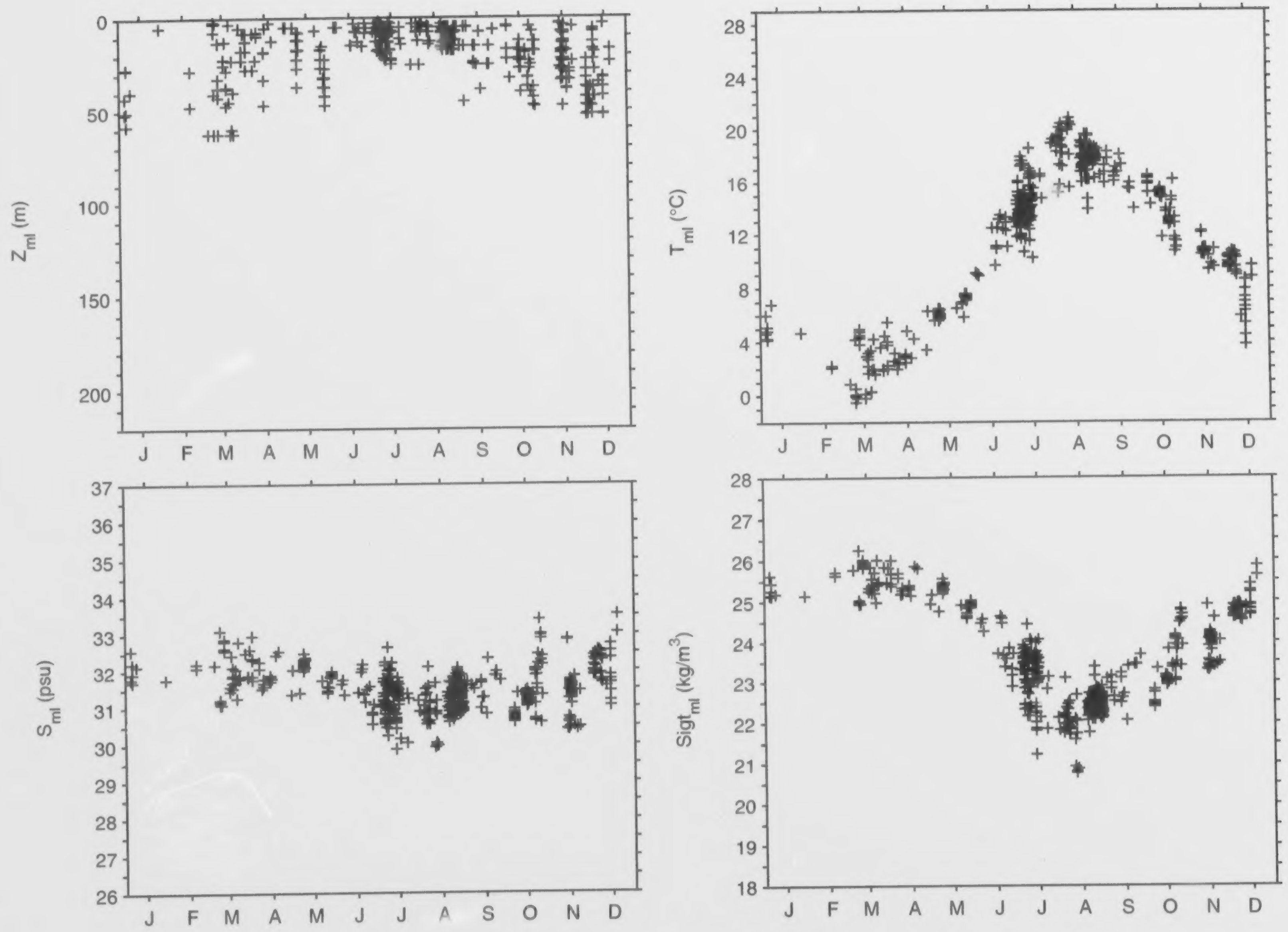

Figure 19b. Calculated mixed layer characteristics for SS16.

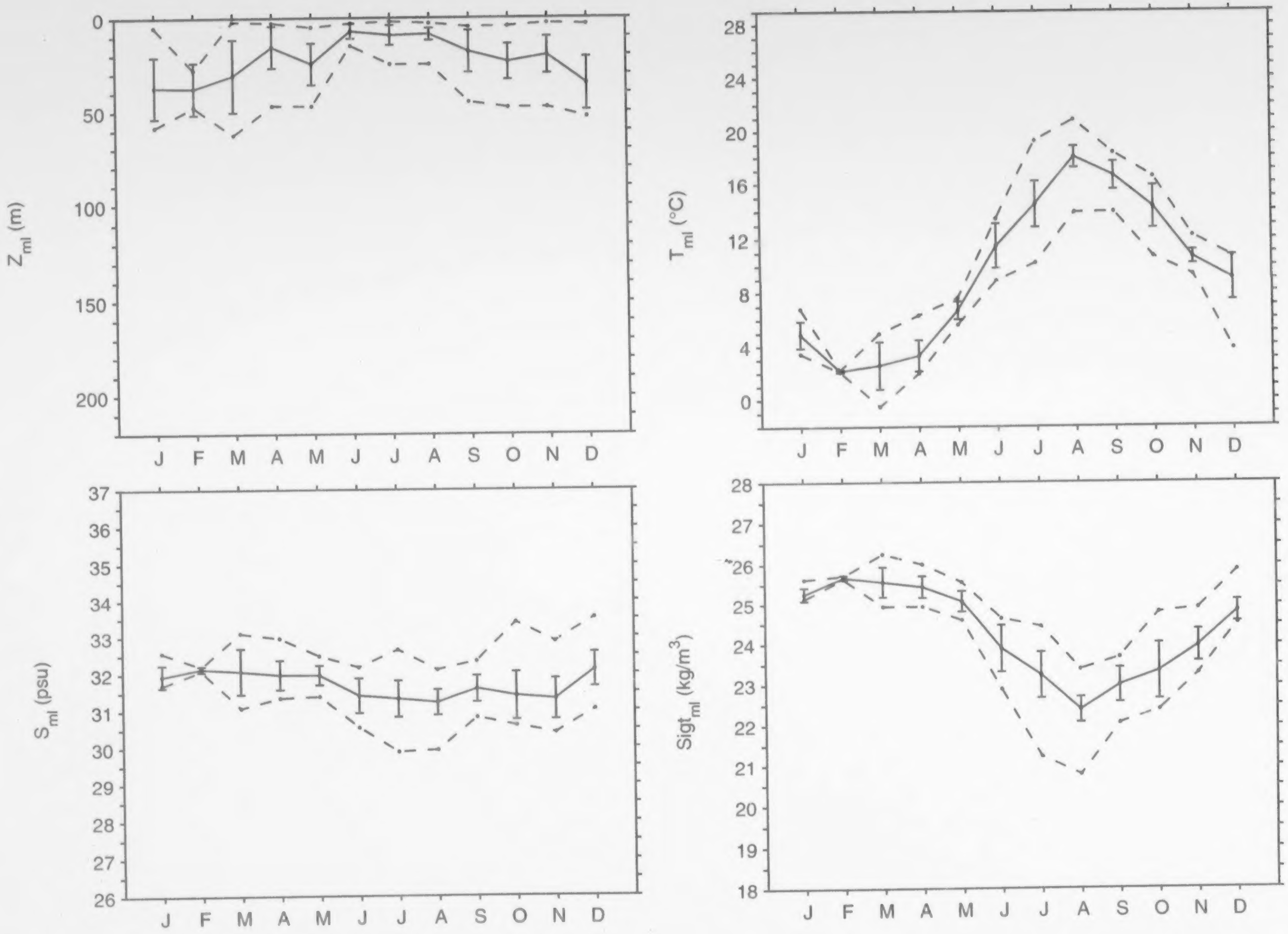

Figure 19c. Monthly statistics of mixed layer characteristics for SS16 (– : mean±sd; –– : min,max).

Table 17. Monthly statistics of mixed layer characteristics for SS16.

Profiles extracted (#) : 1165 Profiles retained (#) : 764 Profiles rejected (%) : 34.4
Mean seabed depth (m) for subregion : 138.5 Mean sounding depth (m) for profiles : 137.7

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	9	2	36	20	84	15	142	269	18	66	58	45
Mixed layer depth : Z_ml (m)												
mean	37.22	37.75	30.89	15.59	24.70	7.18	9.31	8.77	18.09	23.64	20.06	35.13
median	39.90	37.75	32.50	12.30	22.08	5.50	7.55	7.85	15.00	22.00	20.55	37.30
min	5.00	28.00	2.00	2.70	5.00	3.00	2.00	2.90	4.90	4.50	3.00	3.50
max	58.20	47.50	62.50	46.85	47.05	15.00	25.00	25.00	45.00	47.90	47.65	52.75
s.d.	16.33	NaN	19.39	11.27	11.15	3.94	5.27	3.20	11.30	9.49	9.93	14.04
Mixed layer temperature : T_ml (deg.C)												
mean	4.89	2.13	2.56	3.27	6.66	11.47	14.50	17.99	16.58	14.30	10.65	9.05
median	4.70	2.13	2.80	2.94	6.85	12.27	14.48	17.94	16.63	14.86	10.76	9.57
min	3.44	2.07	-0.52	1.96	5.59	8.90	10.24	13.90	13.95	10.70	9.33	3.74
max	6.81	2.20	4.95	6.30	7.57	13.44	19.23	20.84	18.30	16.50	12.21	10.70
s.d.	1.01	NaN	1.78	1.18	0.65	1.64	1.66	0.81	1.04	1.52	0.51	1.71
Mixed layer salinity : S_ml (psu)												
mean	31.94	32.14	32.07	31.98	31.97	31.41	31.33	31.23	31.59	31.40	31.31	32.11
median	31.78	32.14	31.96	31.86	31.95	31.41	31.35	31.24	31.63	31.21	31.45	32.00
min	31.69	32.09	31.08	31.35	31.39	30.55	29.89	29.94	30.82	30.59	30.40	31.03
max	32.57	32.20	33.10	32.96	32.49	32.18	32.65	32.11	32.34	33.40	32.87	33.52
s.d.	0.30	NaN	0.62	0.40	0.26	0.47	0.49	0.35	0.35	0.65	0.56	0.47
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.26	25.67	25.56	25.44	25.08	23.89	23.24	22.39	22.99	23.34	23.97	24.83
median	25.19	25.67	25.52	25.38	24.99	23.71	23.42	22.39	23.09	23.06	24.05	24.80
min	25.14	25.63	24.94	24.94	24.60	22.89	21.23	20.77	22.06	22.38	23.28	24.52
max	25.63	25.71	26.25	26.01	25.56	24.64	24.44	23.38	23.68	24.79	24.90	25.86
s.d.	0.17	NaN	0.38	0.27	0.26	0.57	0.57	0.31	0.42	0.69	0.39	0.27

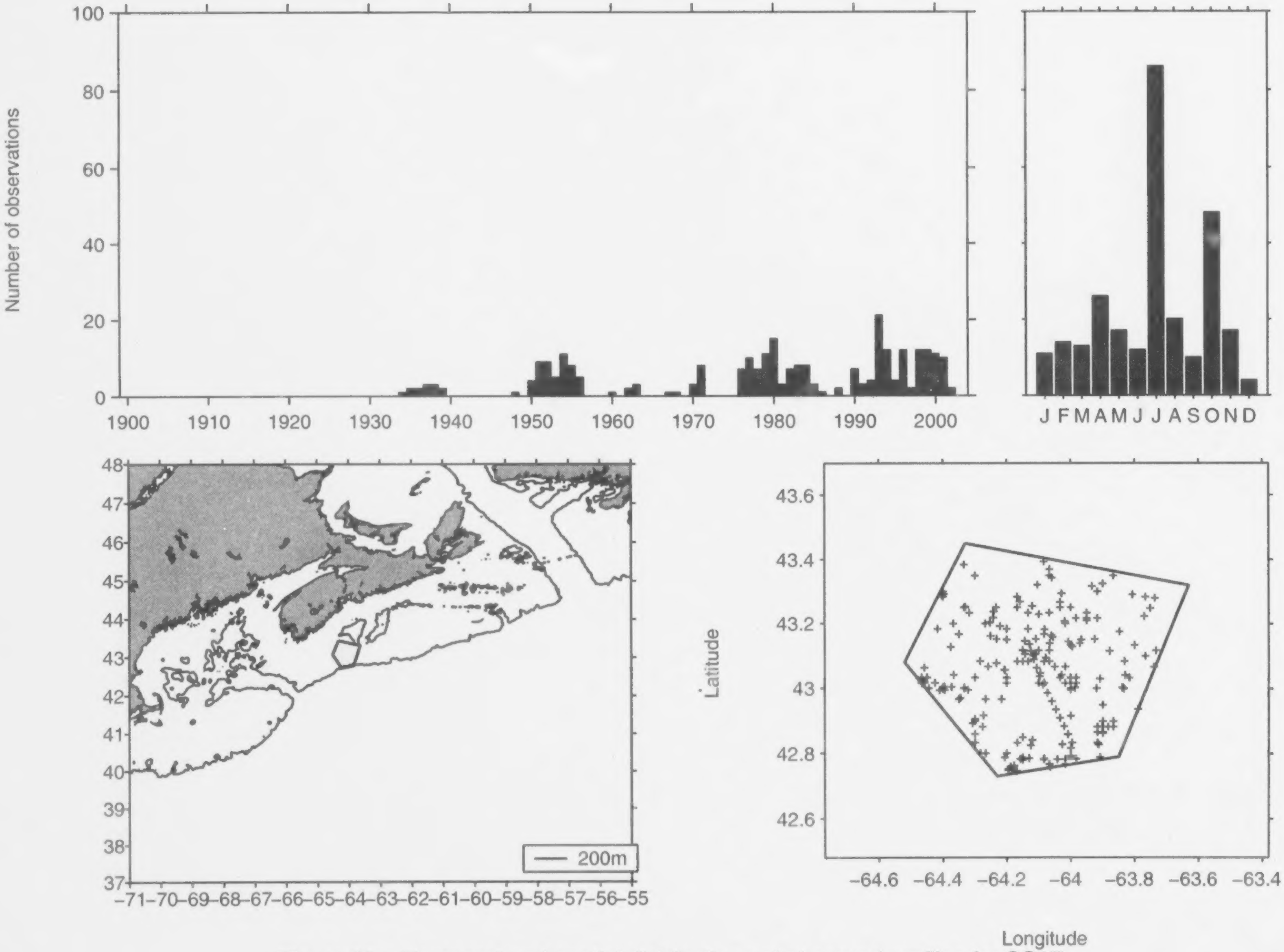

Figure 20a. Temporal and spatial distributions of observed profiles for SS17.

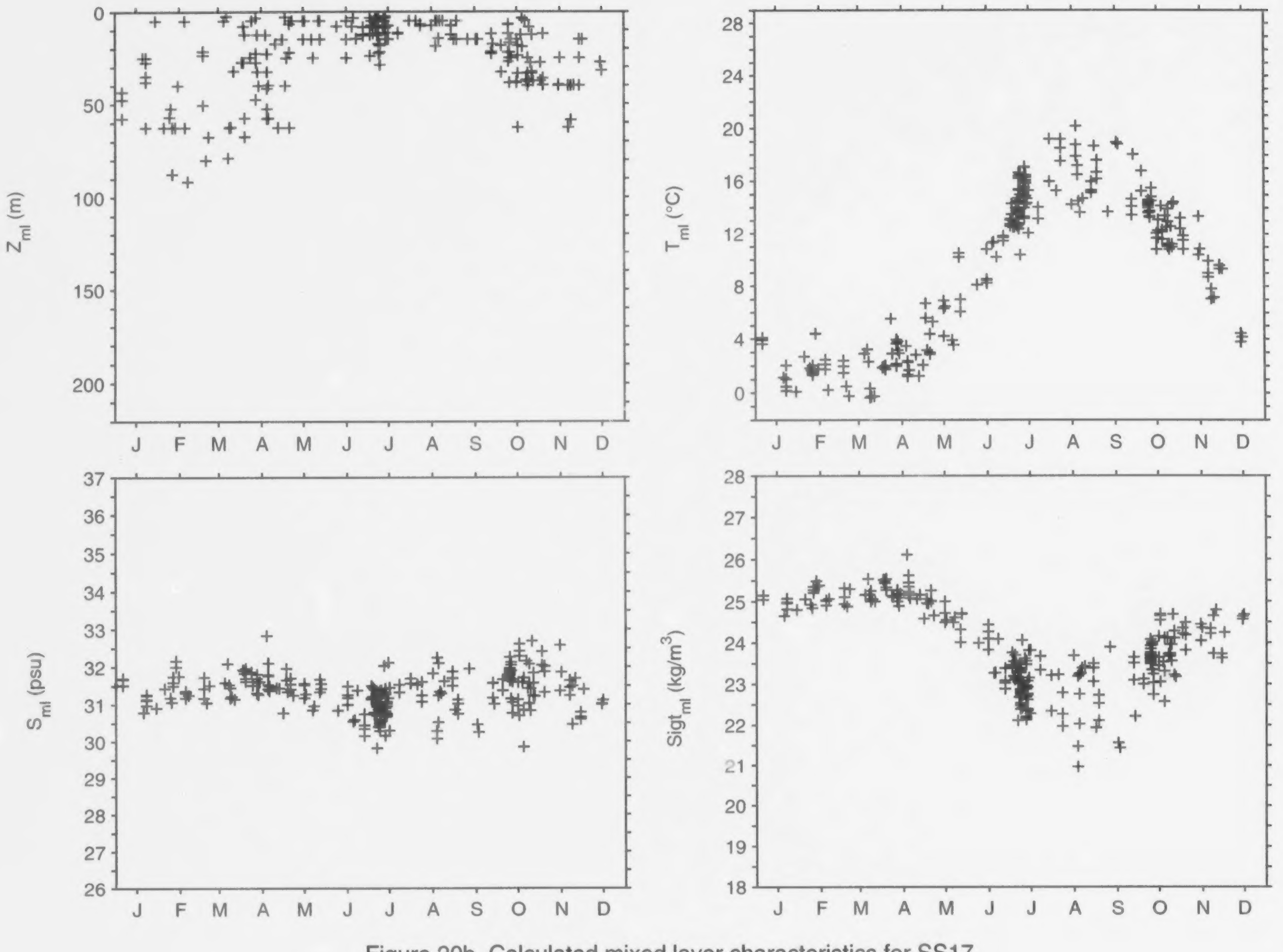

Figure 20b. Calculated mixed layer characteristics for SS17.

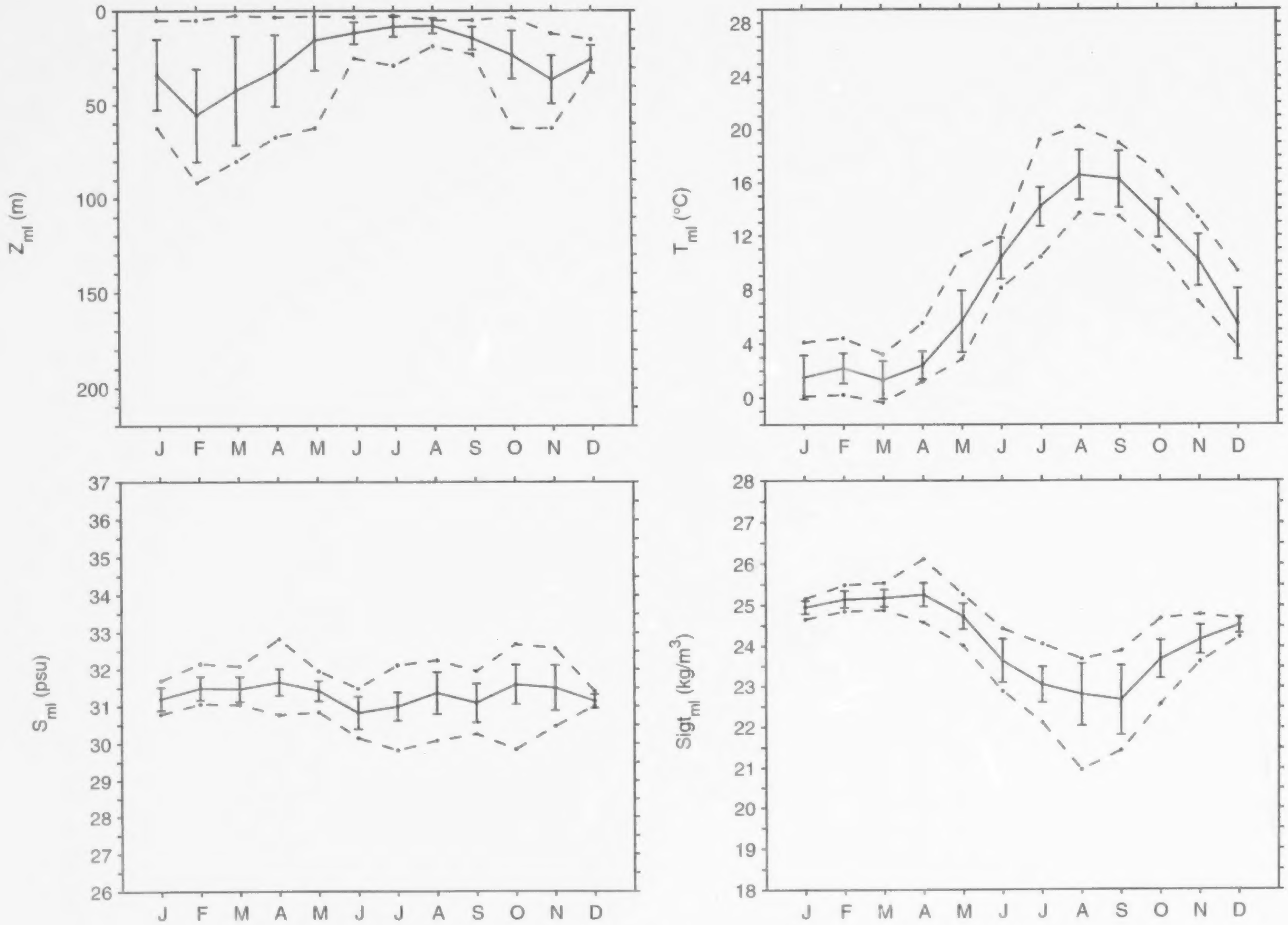

Figure 20c. Monthly statistics of mixed layer characteristics for SS17 (– : mean±sd; –– : min,max).

Table 18. Monthly statistics of mixed layer characteristics for SS17.

Profiles extracted (#) : 320 Profiles retained (#) : 278 Profiles rejected (%) : 13.1
Mean seabed depth (m) for subregion : 118.0 Mean sounding depth (m) for profiles : 121.0

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	11	14	13	26	17	12	86	20	10	48	17	4
Mixed layer depth : Z_ml (m)												
mean	33.80	55.42	42.40	31.82	15.54	11.75	8.37	7.88	14.40	23.12	36.35	25.38
median	35.00	62.50	50.50	27.45	6.75	12.50	7.50	7.07	15.00	22.07	39.80	27.32
min	5.00	5.00	2.50	3.50	3.00	3.50	2.50	5.00	5.00	3.50	12.00	15.00
max	62.50	91.50	80.00	67.30	62.50	25.00	28.75	18.50	22.75	62.50	62.50	31.85
s.d.	18.85	24.83	29.03	19.03	15.88	5.71	5.19	4.01	5.93	12.60	12.90	NaN
Mixed layer temperature : T_ml (deg.C)												
mean	1.54	2.20	1.33	2.41	5.65	10.30	14.17	16.56	16.23	13.28	10.16	5.44
median	1.03	1.93	1.49	2.04	5.58	11.04	13.96	16.24	16.45	13.63	9.93	4.31
min	0.10	0.22	-0.34	1.23	2.86	8.10	10.38	13.65	13.45	10.80	7.07	3.80
max	4.10	4.40	3.22	5.52	10.50	11.84	19.22	20.20	18.98	16.80	13.37	9.34
s.d.	1.62	1.12	1.42	1.03	2.27	1.53	1.46	1.88	2.13	1.43	1.92	NaN
Mixed layer salinity : S_ml (psu)												
mean	31.20	31.49	31.47	31.66	31.42	30.82	30.99	31.36	31.09	31.59	31.50	31.13
median	31.13	31.42	31.45	31.62	31.41	30.79	31.01	31.51	31.07	31.67	31.49	31.06
min	30.79	31.06	31.04	30.77	30.84	30.15	29.82	30.08	30.26	29.85	30.46	31.01
max	31.70	32.16	32.09	32.83	31.96	31.48	32.11	32.25	31.95	32.69	32.58	31.40
s.d.	0.31	0.32	0.34	0.36	0.28	0.43	0.38	0.57	0.52	0.54	0.62	NaN
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	24.94	25.14	25.17	25.26	24.74	23.63	23.05	22.81	22.67	23.69	24.17	24.53
median	24.97	25.06	25.16	25.21	24.71	23.61	23.08	23.21	22.63	23.68	24.22	24.60
min	24.65	24.84	24.88	24.58	24.01	22.88	22.11	20.96	21.44	22.57	23.63	24.25
max	25.15	25.49	25.54	26.12	25.26	24.44	24.06	23.69	23.89	24.69	24.79	24.68
s.d.	0.16	0.20	0.21	0.28	0.31	0.54	0.44	0.77	0.86	0.47	0.36	NaN

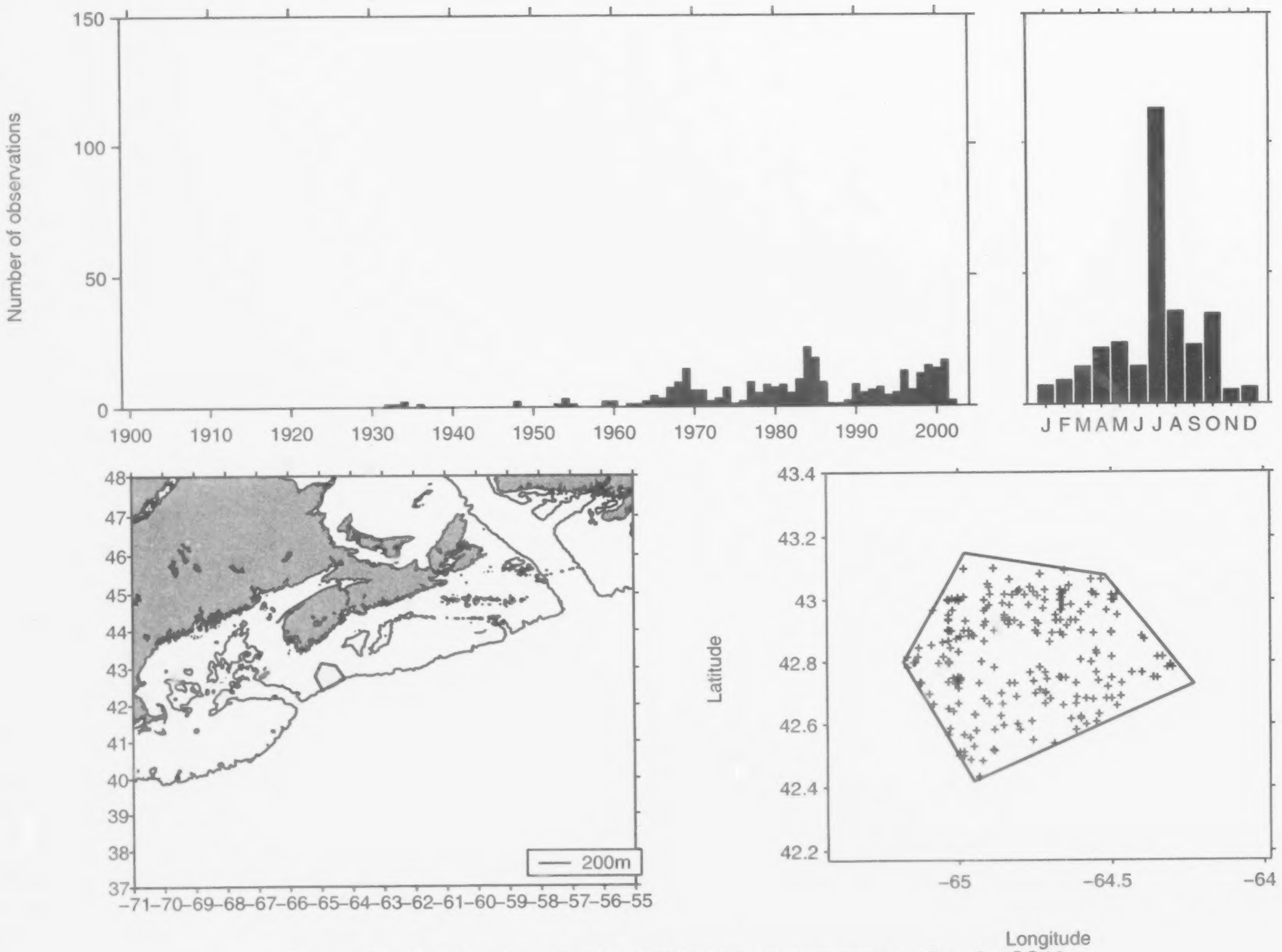

Figure 21a. Temporal and spatial distributions of observed profiles for SS18.

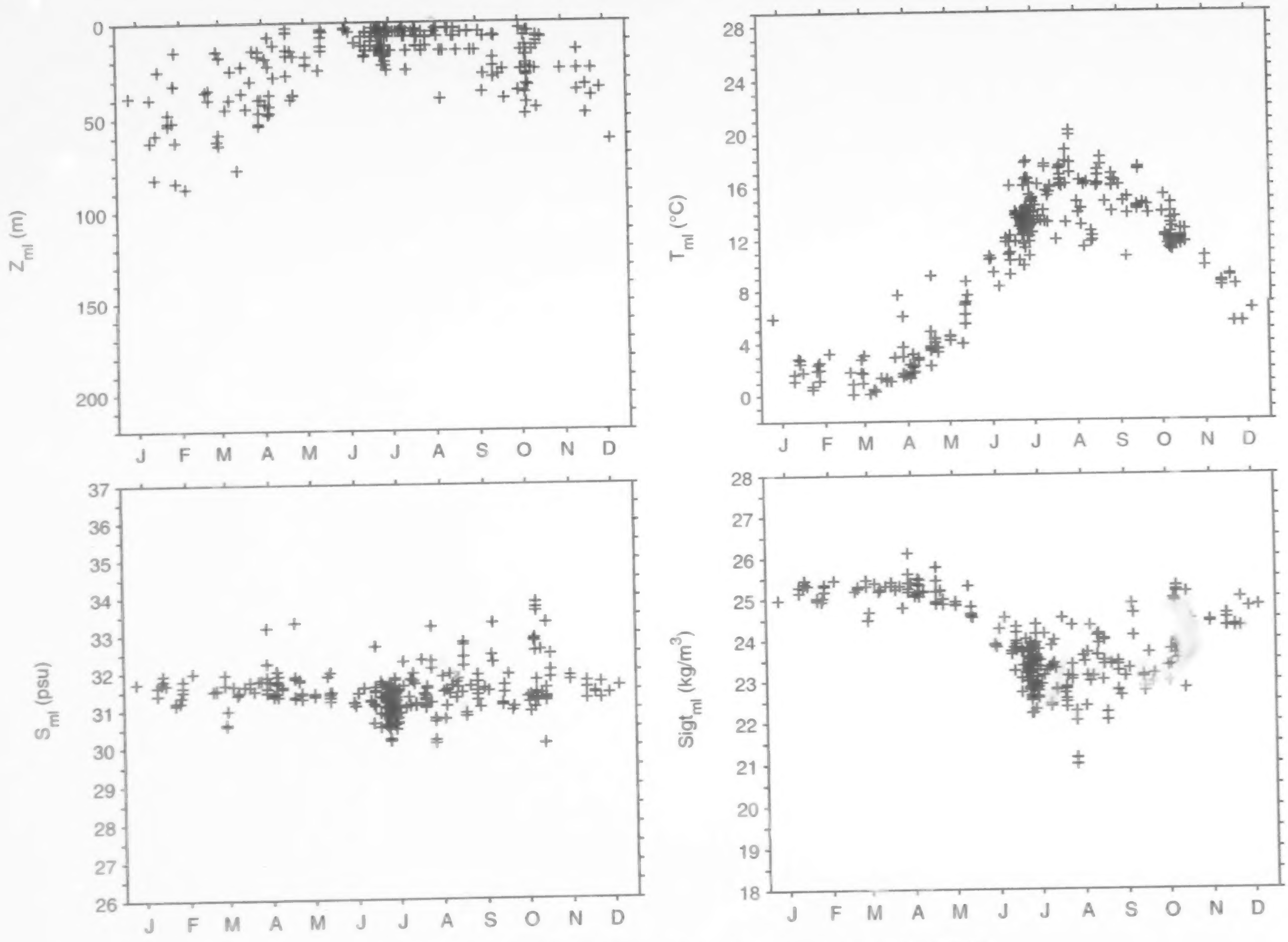

Figure 21b. Calculated mixed layer characteristics for SS18.

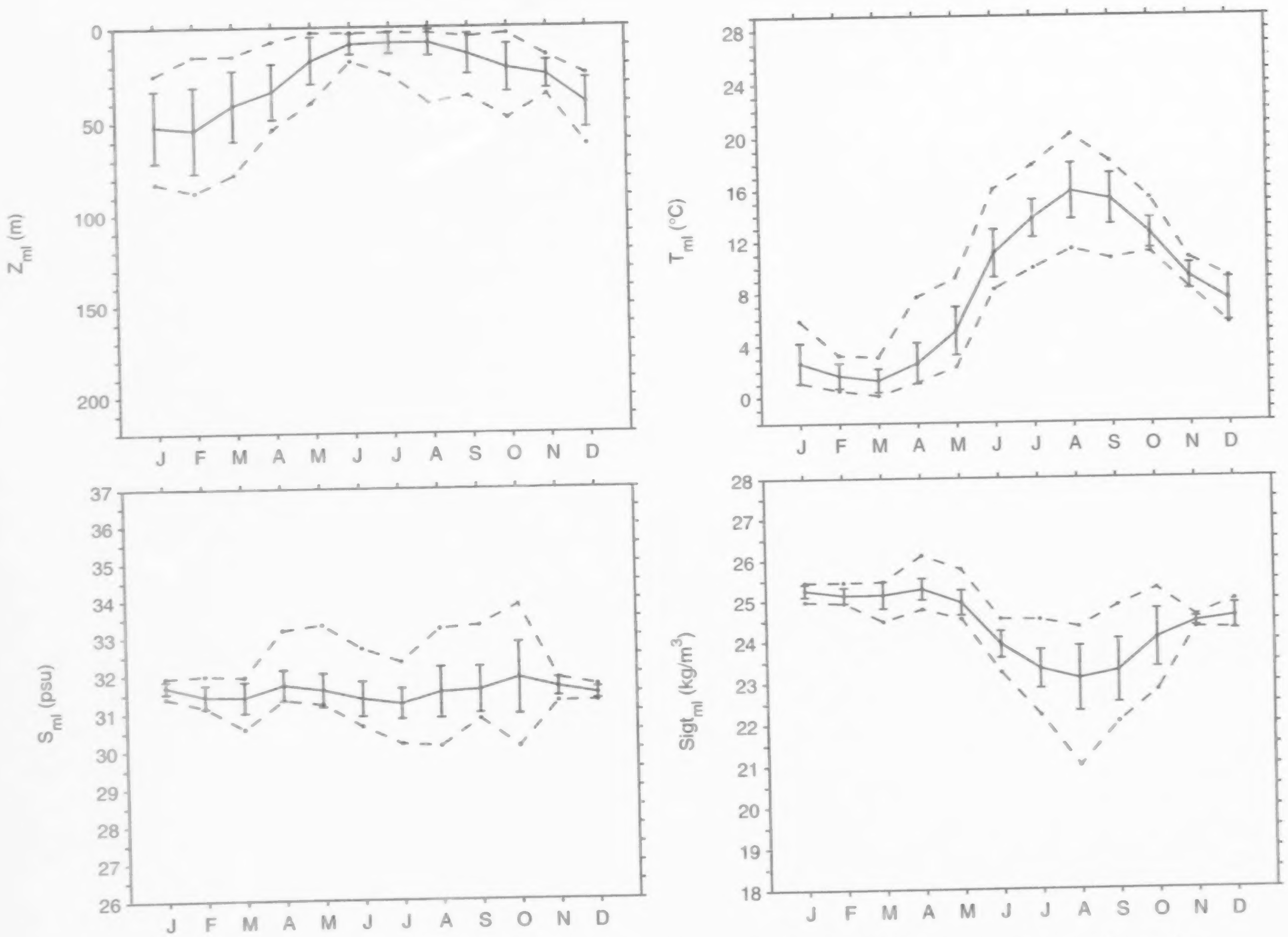

Figure 21c. Monthly statistics of mixed layer characteristics for SS18 (– : mean±sd; –– : min,max).

Table 19. Monthly statistics of mixed layer characteristics for SS18.

Profiles extracted (#) : 349 Profiles retained (#) : 303 Profiles rejected (%) : 13.2
Mean seabed depth (m) for subregion : 110.2 Mean sounding depth (m) for profiles : 110.0

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	7	9	14	21	23	14	113	35	21	35	5	6
Mixed layer depth : Z_ml (m)												
mean	52.15	54.10	41.17	33.90	17.46	8.93	8.20	8.17	14.15	21.66	25.20	40.50
median	58.50	52.20	38.35	40.00	15.00	6.50	5.65	7.50	7.80	23.65	25.00	37.00
min	25.00	15.00	14.90	7.60	2.90	3.10	3.00	3.15	5.00	3.50	15.00	25.00
max	82.50	87.50	77.80	53.95	40.00	18.00	25.00	40.00	36.50	48.35	36.00	62.50
s.d.	19.11	22.82	18.73	14.84	12.38	5.34	5.61	6.66	10.57	12.60	7.43	13.19
Mixed layer temperature : T_ml (deg.C)												
mean	2.65	1.66	1.27	2.61	5.07	11.03	13.71	15.83	15.23	12.53	9.18	7.35
median	2.48	1.94	1.21	2.19	4.37	10.74	13.40	16.17	15.16	12.14	8.68	7.43
min	1.11	0.49	0.09	1.10	2.30	8.29	9.91	11.36	10.59	11.11	8.26	5.52
max	5.88	3.24	3.10	7.67	9.16	16.00	17.84	20.17	18.13	15.30	10.62	9.15
s.d.	1.56	0.99	0.92	1.59	1.83	1.82	1.46	2.18	1.99	1.17	1.01	1.70
Mixed layer salinity : S_ml (psu)												
mean	31.69	31.43	31.41	31.72	31.59	31.36	31.23	31.52	31.58	31.88	31.63	31.47
median	31.70	31.35	31.52	31.68	31.42	31.23	31.26	31.44	31.48	31.43	31.73	31.42
min	31.40	31.14	30.58	31.34	31.21	30.63	30.16	30.10	30.81	30.07	31.26	31.26
max	31.93	31.98	31.94	33.18	33.31	32.68	32.32	33.20	33.30	33.84	31.87	31.69
s.d.	0.16	0.30	0.40	0.40	0.44	0.46	0.40	0.67	0.61	0.95	0.24	0.15
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.26	25.13	25.14	25.29	24.95	23.92	23.32	23.09	23.27	24.06	24.45	24.58
median	25.29	25.02	25.28	25.24	24.89	23.88	23.37	23.10	23.13	23.91	24.45	24.55
min	24.97	24.93	24.48	24.78	24.54	23.24	22.21	20.99	22.04	22.80	24.30	24.28
max	25.45	25.45	25.46	26.11	25.77	24.54	24.52	24.34	24.86	25.29	24.60	24.99
s.d.	0.16	0.20	0.33	0.26	0.31	0.32	0.46	0.79	0.77	0.71	0.11	0.31

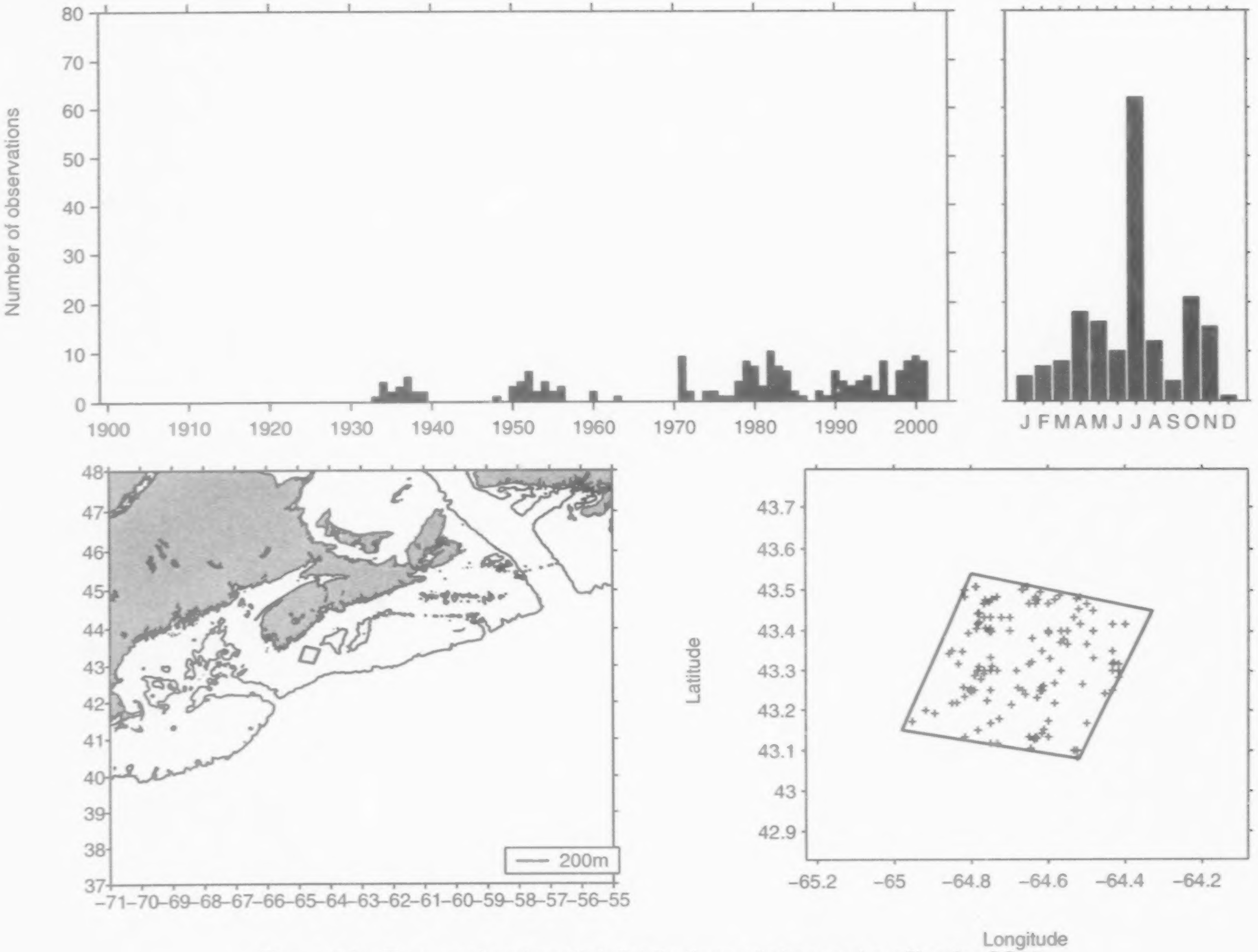

Figure 22a. Temporal and spatial distributions of observed profiles for SS19.

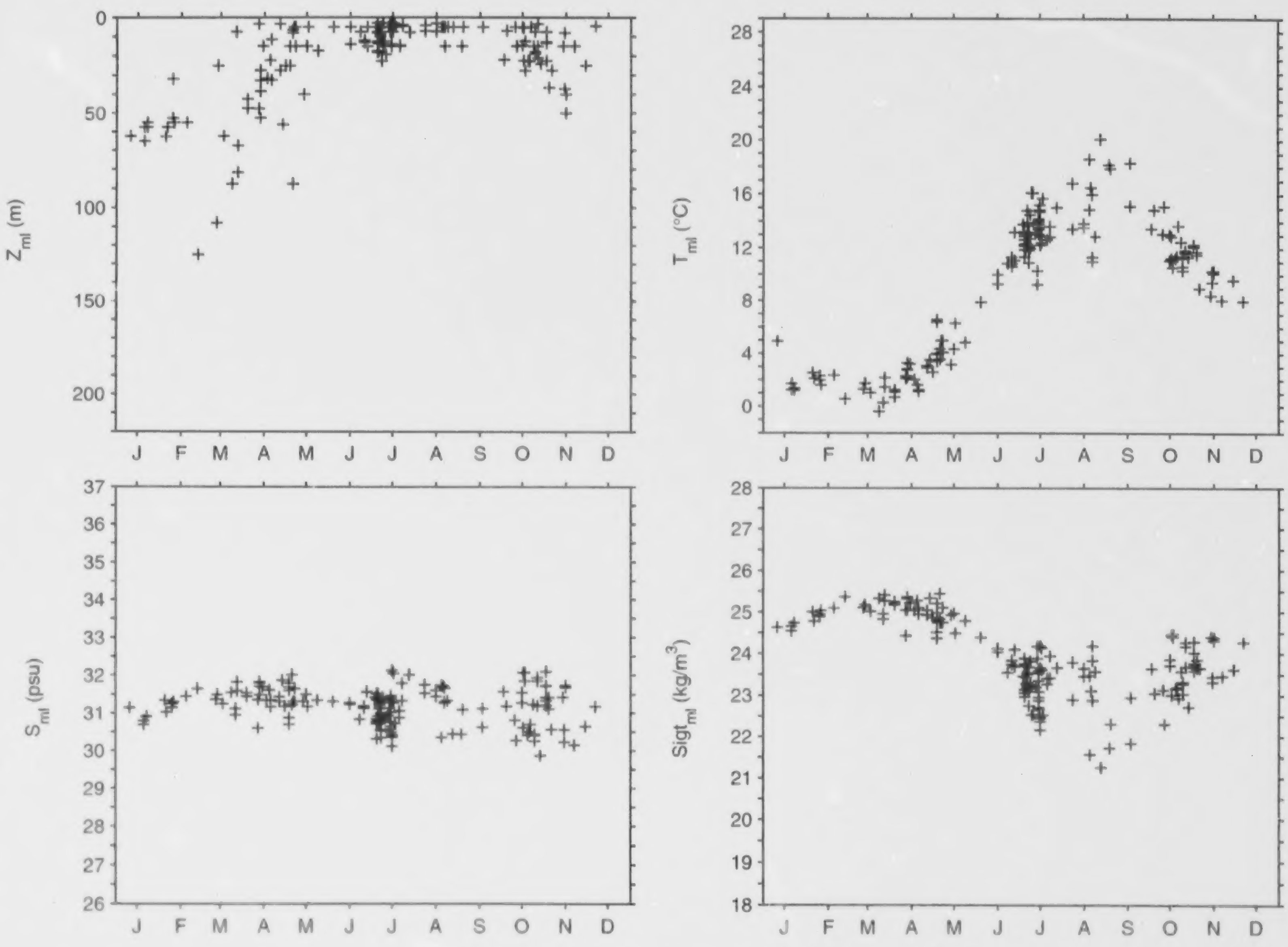

Figure 22b. Calculated mixed layer characteristics for SS19.

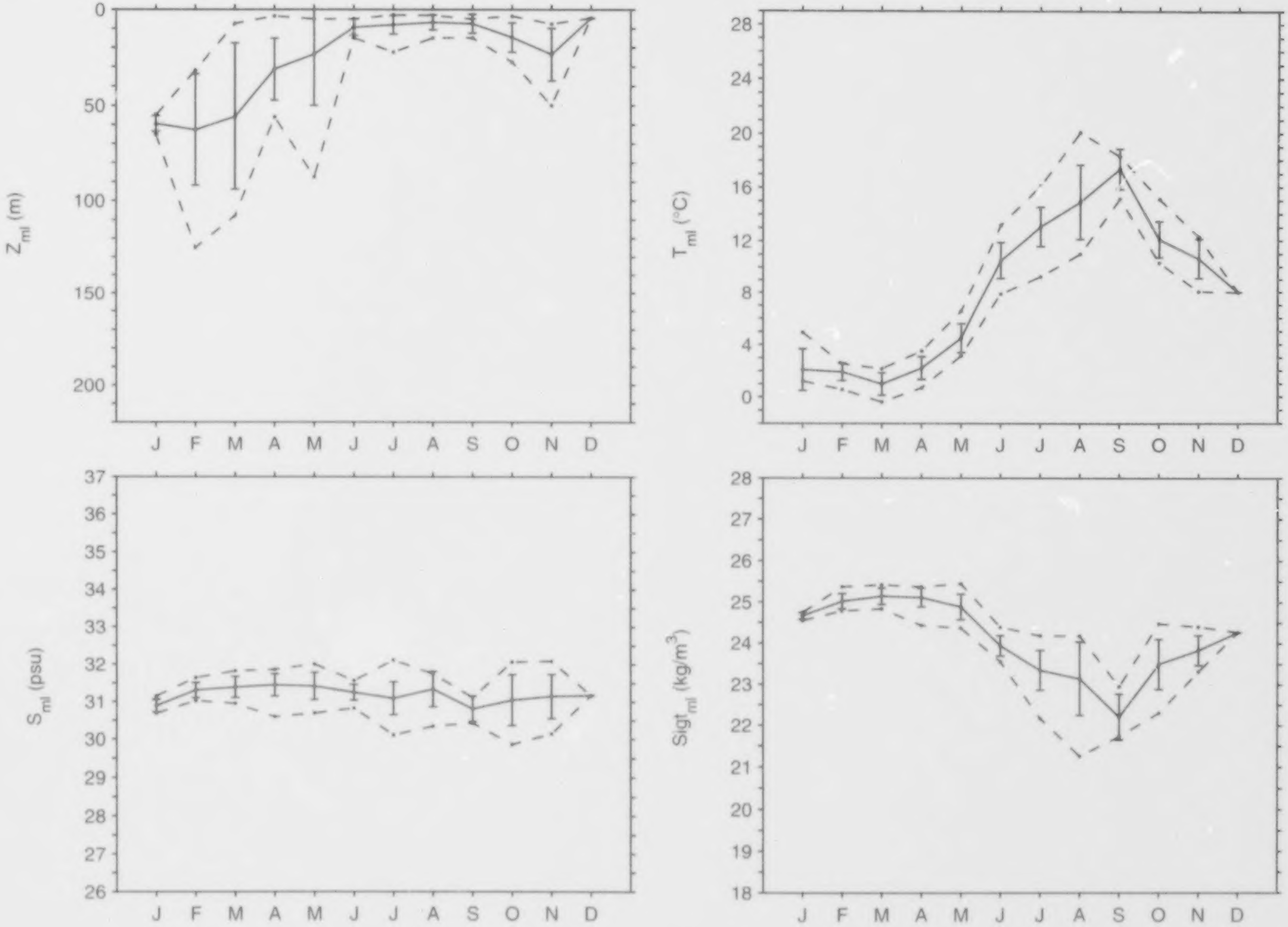

Figure 22c. Monthly statistics of mixed layer characteristics for SS19 (– : mean±sd; -- : min,max).

Table 20. Monthly statistics of mixed layer characteristics for SS19.

Profiles extracted (#) : 229 Profiles retained (#) : 179 Profiles rejected (%) : 21.8
Mean seabed depth (m) for subregion : 117.8 Mean sounding depth (m) for profiles : 111.8

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	5	7	8	18	16	10	62	12	4	21	15	1
Mixed layer depth : Z_ml (m)												
mean	59.45	62.78	55.84	31.31	23.55	9.40	8.11	6.82	7.50	14.75	23.63	4.50
median	57.50	55.00	64.83	32.00	15.00	9.75	7.50	5.00	5.00	15.00	22.45	4.50
min	55.00	31.85	7.40	3.50	5.00	5.00	3.00	3.10	5.00	3.50	7.60	4.50
max	65.00	125.00	108.00	56.00	87.50	15.00	22.50	15.00	15.00	27.55	50.00	4.50
s.d.	4.06	29.10	38.16	16.04	26.45	4.25	4.92	3.99	NaN	7.65	13.67	NaN
Mixed layer temperature : T_ml (deg.C)												
mean	2.09	1.92	0.99	2.22	4.51	10.51	13.08	14.92	17.39	12.11	10.64	8.00
median	1.36	2.10	1.17	2.28	4.21	10.71	13.05	14.38	18.04	11.66	10.31	8.00
min	1.21	0.56	-0.38	0.69	3.17	7.90	9.25	11.01	15.15	10.33	8.07	8.00
max	4.93	2.56	2.18	3.53	6.55	13.20	16.12	20.10	18.32	15.13	12.29	8.00
s.d.	1.60	0.67	0.86	0.88	1.09	1.39	1.47	2.78	NaN	1.37	1.51	NaN
Mixed layer salinity : S_ml (psu)												
mean	30.89	31.31	31.39	31.45	31.42	31.25	31.09	31.34	30.82	31.05	31.15	31.17
median	30.90	31.30	31.43	31.44	31.33	31.25	31.13	31.48	30.86	31.18	31.33	31.17
min	30.69	31.02	30.95	30.60	30.70	30.83	30.11	30.35	30.43	29.87	30.15	31.17
max	31.14	31.64	31.83	31.87	32.01	31.57	32.12	31.75	31.12	32.07	32.09	31.17
s.d.	0.17	0.20	0.28	0.30	0.36	0.21	0.44	0.47	NaN	0.68	0.59	NaN
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	24.66	25.02	25.14	25.11	24.88	23.93	23.34	23.14	22.21	23.49	23.83	24.27
median	24.66	25.00	25.14	25.14	24.81	23.94	23.38	23.46	22.07	23.31	23.70	24.27
min	24.54	24.78	24.83	24.43	24.37	23.55	22.17	21.26	21.73	22.30	23.31	24.27
max	24.74	25.37	25.42	25.37	25.45	24.39	24.18	24.18	22.95	24.47	24.41	24.27
s.d.	0.08	0.19	0.20	0.23	0.31	0.25	0.48	0.89	NaN	0.61	0.36	NaN

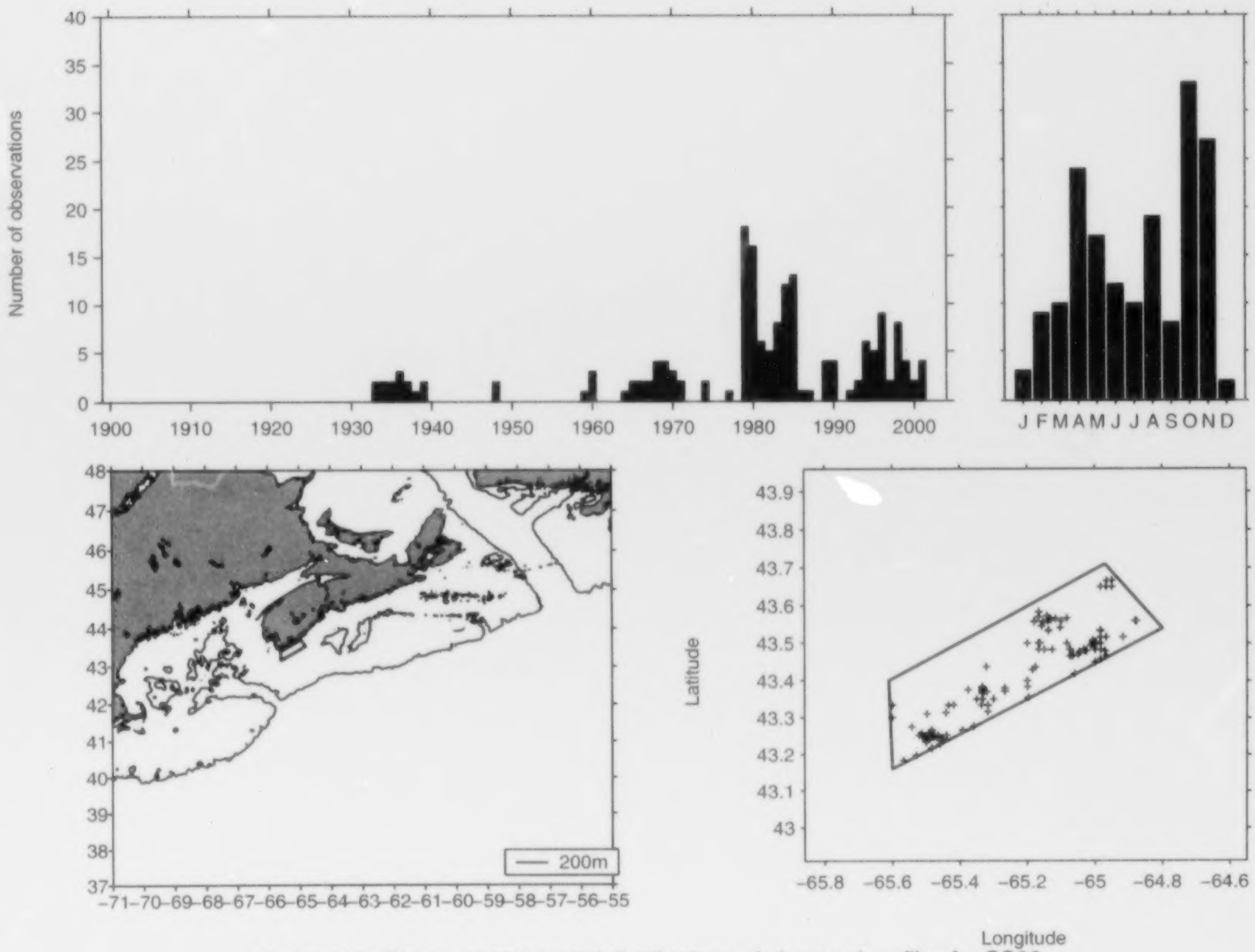

Figure 23a. Temporal and spatial distributions of observed profiles for SS20.

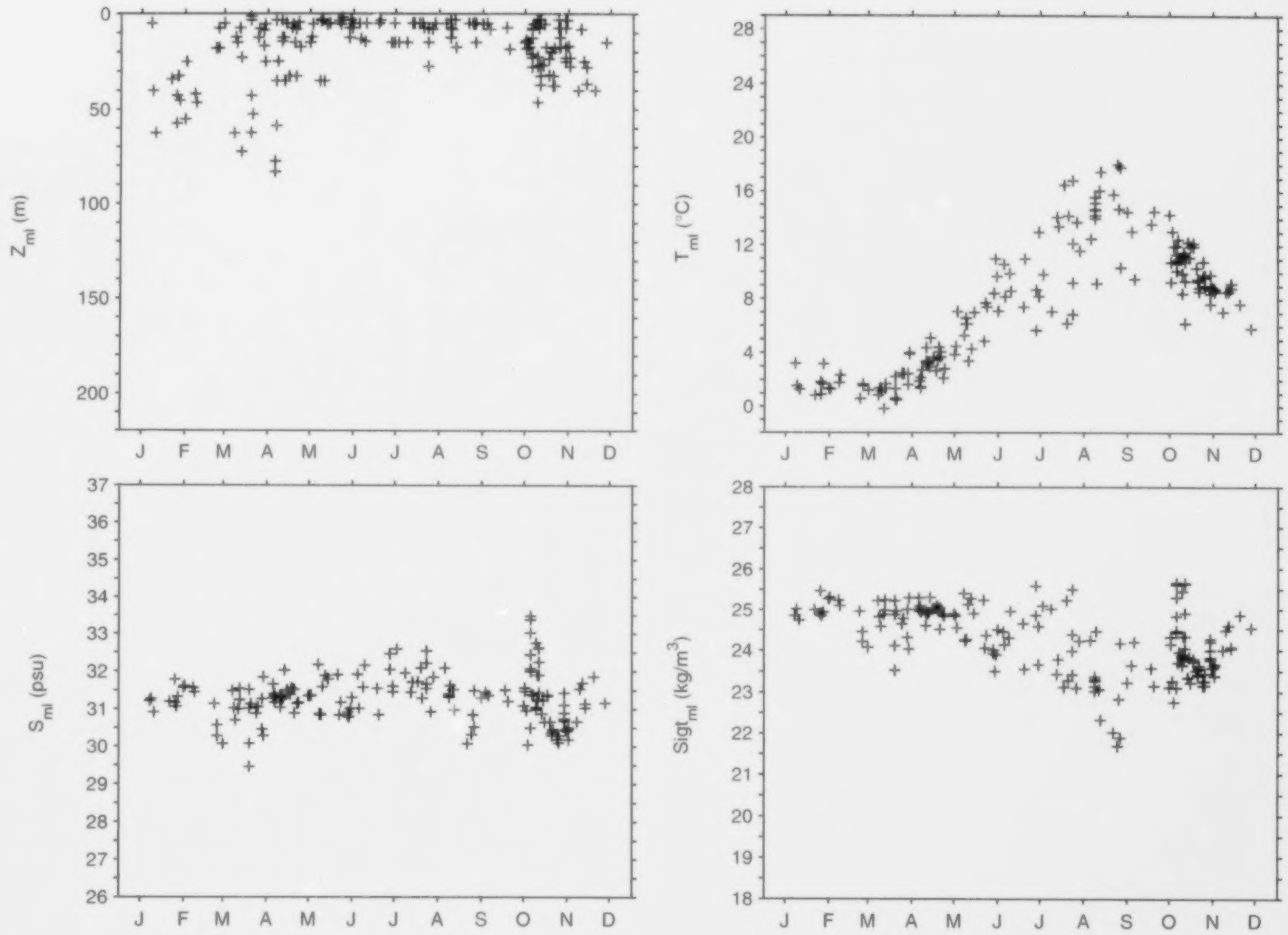

Figure 23b. Calculated mixed layer characteristics for SS20.

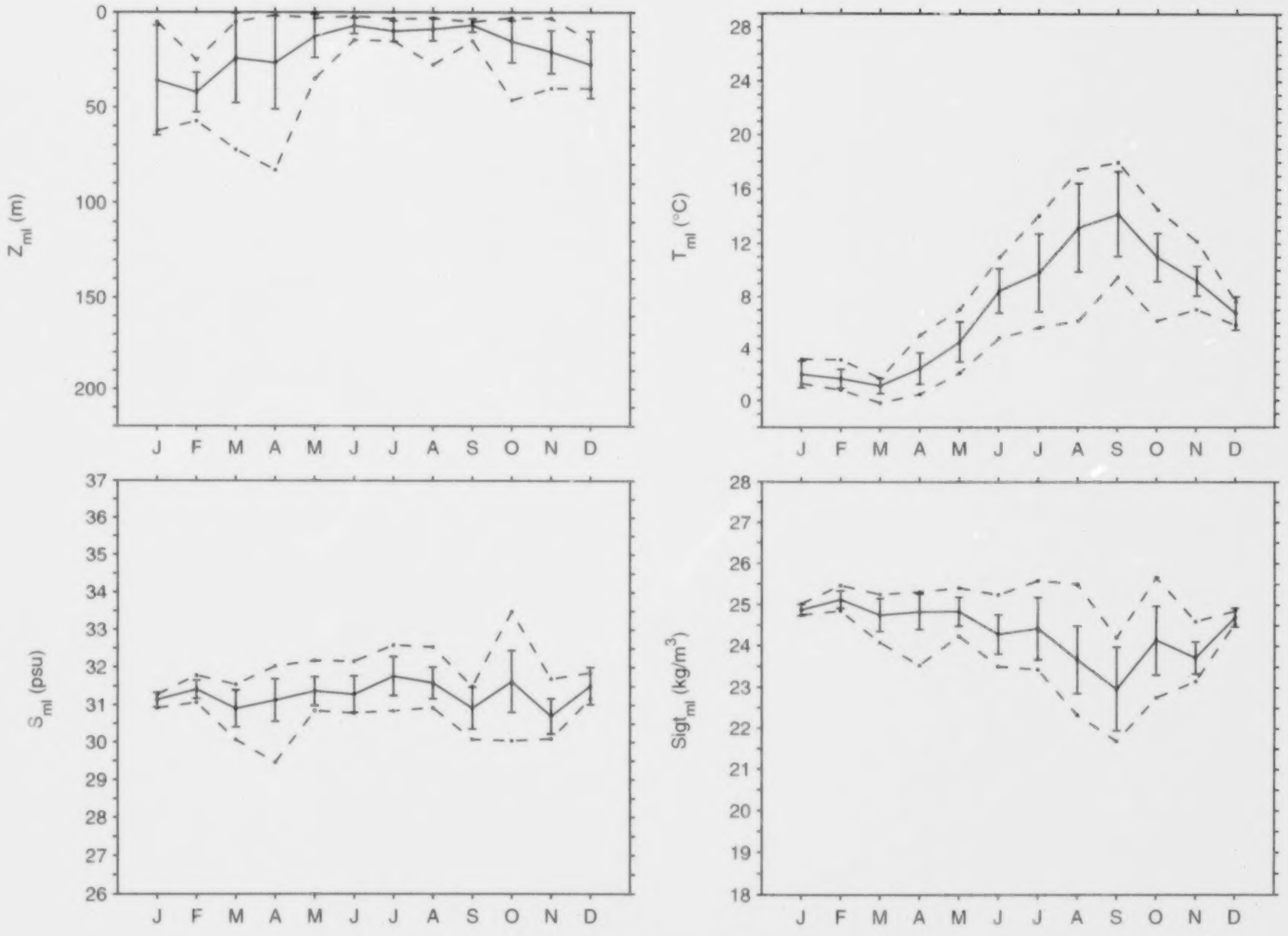

Figure 23c. Monthly statistics of mixed layer characteristics for SS20 (– : mean±sd; -- : min,max).

Table 21. Monthly statistics of mixed layer characteristics for SS20.

Profiles extracted (#) : 222 Profiles retained (#) : 174 Profiles rejected (%) : 21.6
Mean seabed depth (m) for subregion : 76.8 Mean sounding depth (m) for profiles : 81.9

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	3	9	10	24	17	12	10	19	8	33	27	2
Mixed layer depth : Z_ml (m)												
mean	35.83	42.13	24.09	26.49	12.56	7.04	9.85	8.84	6.77	15.29	20.81	27.50
median	40.00	42.50	16.50	15.62	7.25	5.25	10.00	7.50	5.25	13.90	23.00	27.50
min	5.00	25.00	5.00	1.50	3.10	2.00	3.50	3.15	4.95	3.00	3.25	15.00
max	62.50	57.35	72.35	83.00	35.00	14.45	15.00	27.45	15.00	46.25	40.00	40.00
s.d.	NaN	10.48	23.61	24.52	11.21	4.12	5.45	6.02	3.50	11.06	11.33	NaN
Mixed layer temperature : T_ml (deg.C)												
mean	2.02	1.69	1.14	2.49	4.56	8.49	9.83	13.20	14.21	10.99	9.22	6.75
median	1.55	1.69	1.31	2.45	4.30	8.41	9.26	14.21	14.61	11.11	8.84	6.75
min	1.30	0.83	-0.16	0.50	2.13	4.87	5.67	6.20	9.51	6.20	7.05	5.85
max	3.20	3.16	1.70	5.10	7.06	10.98	14.10	17.46	18.00	14.54	12.18	7.66
s.d.	NaN	0.73	0.58	1.23	1.55	1.68	2.93	3.27	3.13	1.80	1.11	NaN
Mixed layer salinity : S_ml (psu)												
mean	31.13	31.42	30.91	31.13	31.37	31.29	31.77	31.59	30.92	31.63	30.70	31.51
median	31.22	31.45	31.01	31.28	31.37	31.10	31.66	31.53	31.08	31.39	30.49	31.51
min	30.91	31.07	30.07	29.46	30.85	30.79	30.85	30.93	30.08	30.04	30.09	31.17
max	31.27	31.78	31.54	32.03	32.18	32.16	32.59	32.54	31.50	33.48	31.70	31.86
s.d.	NaN	0.24	0.49	0.57	0.38	0.49	0.51	0.42	0.56	0.82	0.47	NaN
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	24.87	25.12	24.74	24.82	24.83	24.28	24.42	23.67	22.96	24.14	23.71	24.70
median	24.85	25.10	24.85	24.95	24.89	24.21	24.61	23.30	23.03	23.89	23.63	24.70
min	24.74	24.84	24.07	23.52	24.23	23.50	23.43	22.32	21.69	22.75	23.15	24.54
max	25.01	25.46	25.25	25.31	25.41	25.24	25.59	25.50	24.20	25.66	24.59	24.86
s.d.	NaN	0.21	0.40	0.44	0.35	0.48	0.76	0.81	1.01	0.84	0.39	NaN

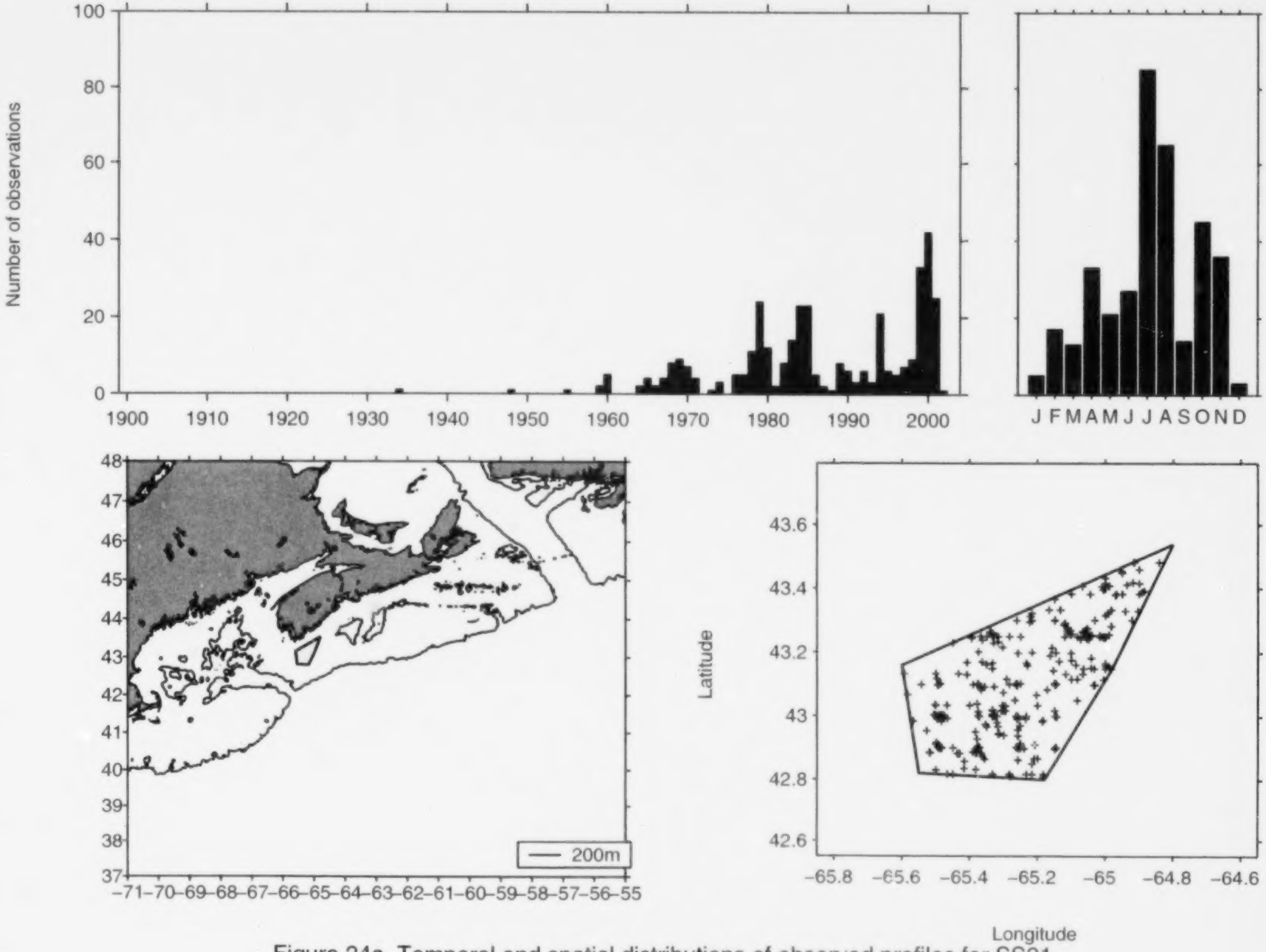

Figure 24a. Temporal and spatial distributions of observed profiles for SS21.

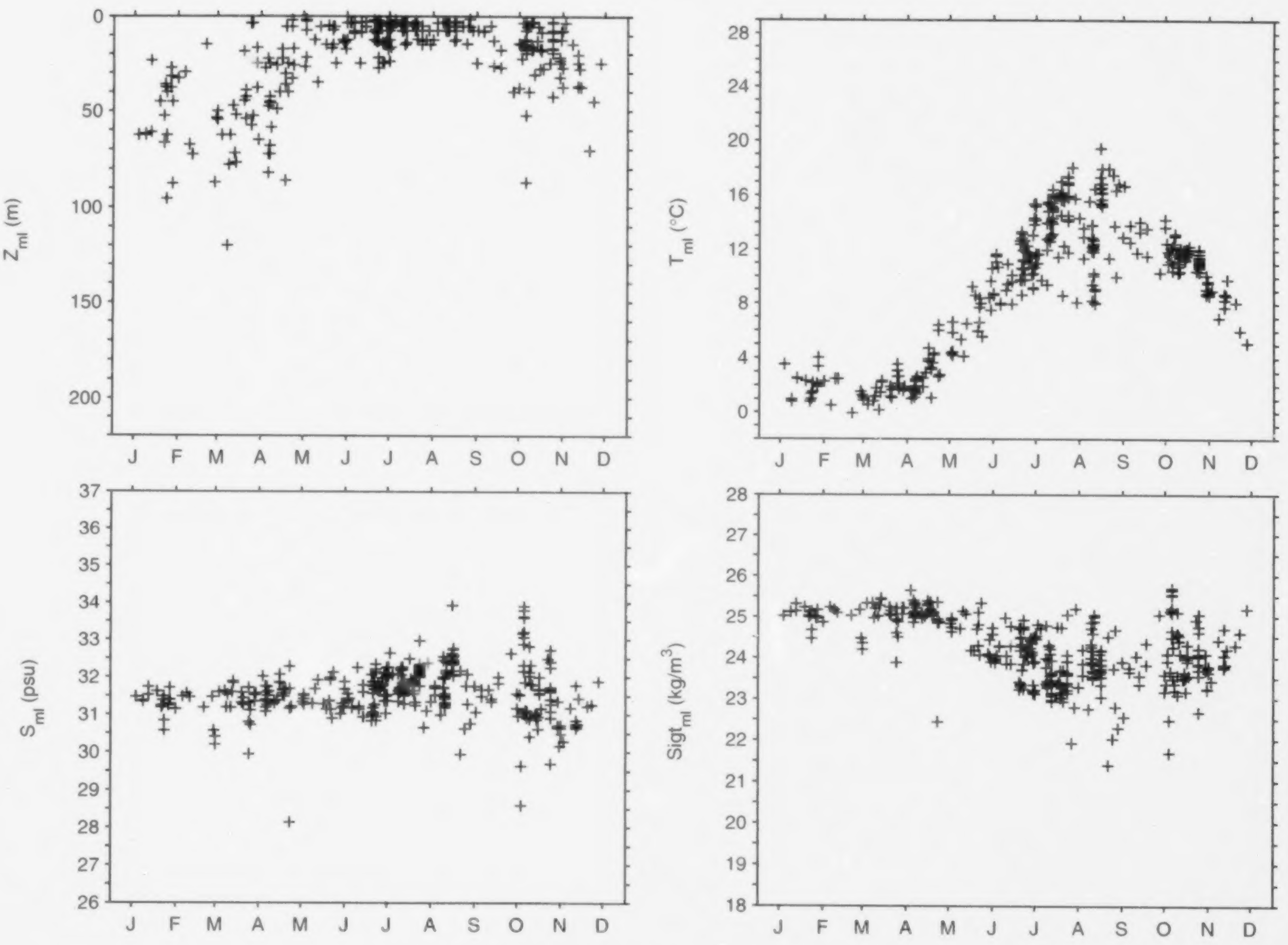

Figure 24b. Calculated mixed layer characteristics for SS21.

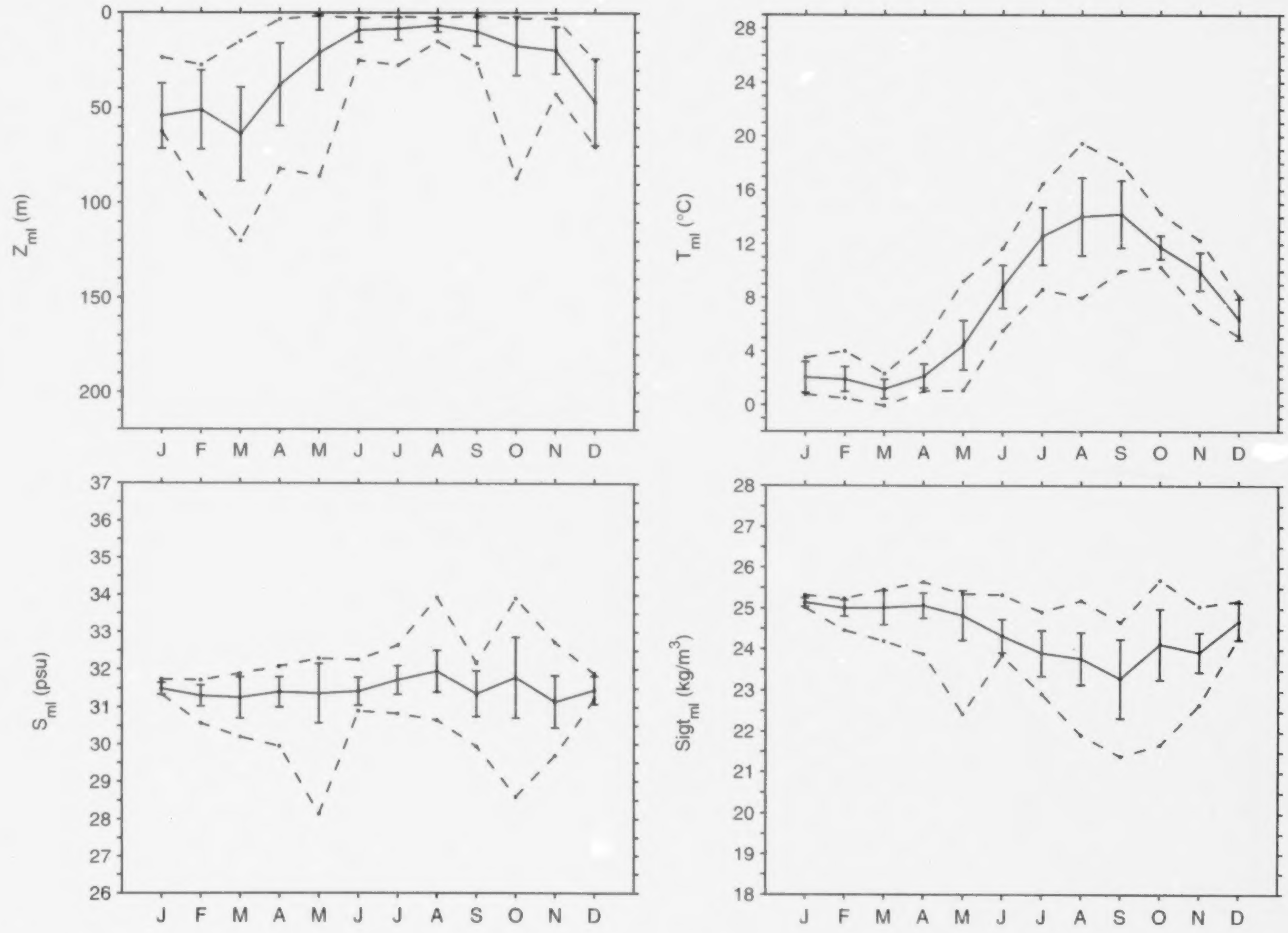

Figure 24c. Monthly statistics of mixed layer characteristics for SS21 (– : mean±sd; –– : min,max).

Table 22. Monthly statistics of mixed layer characteristics for SS21.

Profiles extracted (#) : 408 Profiles retained (#) : 364 Profiles rejected (%) : 10.8
Mean seabed depth (m) for subregion : 140.2 Mean sounding depth (m) for profiles : 138.4

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	5	17	13	33	21	27	85	65	14	45	36	3
Mixed layer depth : Z_ml (m)												
mean	54.30	51.01	63.86	37.84	20.98	9.07	8.39	6.56	9.85	17.36	19.62	46.83
median	62.00	45.00	62.50	40.00	17.20	7.20	7.50	7.40	7.53	15.00	18.55	45.00
min	23.50	27.35	14.85	3.50	1.75	3.00	2.00	2.75	1.50	3.00	3.00	25.00
max	62.50	95.50	120.00	82.00	86.00	25.00	27.50	15.00	26.45	87.10	42.50	70.50
s.d.	17.23	20.79	24.69	21.72	19.57	6.46	5.83	3.47	7.50	15.40	12.24	NaN
Mixed layer temperature : T_ml (deg.C)												
mean	2.07	1.93	1.20	2.17	4.47	8.83	12.59	14.05	14.24	11.77	9.98	6.41
median	2.51	2.02	1.19	1.92	4.23	8.60	12.63	14.56	13.81	11.76	9.97	6.00
min	0.80	0.52	-0.05	1.04	1.10	5.56	8.64	8.00	10.00	10.30	6.95	5.12
max	3.53	4.03	2.35	4.72	9.24	11.69	16.48	19.48	18.00	14.27	12.29	8.10
s.d.	1.16	0.92	0.72	0.89	1.84	1.61	2.14	2.89	2.49	0.87	1.40	NaN
Mixed layer salinity : S_ml (psu)												
mean	31.49	31.30	31.26	31.40	31.37	31.42	31.72	31.95	31.36	31.79	31.14	31.45
median	31.47	31.29	31.47	31.39	31.51	31.30	31.72	31.98	31.45	31.80	31.12	31.26
min	31.34	30.57	30.20	29.95	28.14	30.90	30.83	30.66	29.94	28.59	29.69	31.22
max	31.74	31.72	31.89	32.08	32.29	32.26	32.64	33.93	32.17	33.91	32.72	31.88
s.d.	0.16	0.28	0.54	0.40	0.79	0.37	0.38	0.55	0.60	1.07	0.69	NaN
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.15	25.01	25.02	25.07	24.83	24.33	23.91	23.78	23.30	24.13	23.93	24.69
median	25.13	25.03	25.18	25.07	24.94	24.28	24.02	23.69	23.60	24.08	23.83	24.60
min	25.02	24.46	24.20	23.88	22.44	23.84	22.93	21.93	21.40	21.69	22.67	24.29
max	25.32	25.24	25.46	25.65	25.36	25.34	24.92	25.20	24.67	25.69	25.06	25.19
s.d.	0.11	0.20	0.42	0.31	0.61	0.41	0.56	0.63	0.95	0.86	0.48	NaN

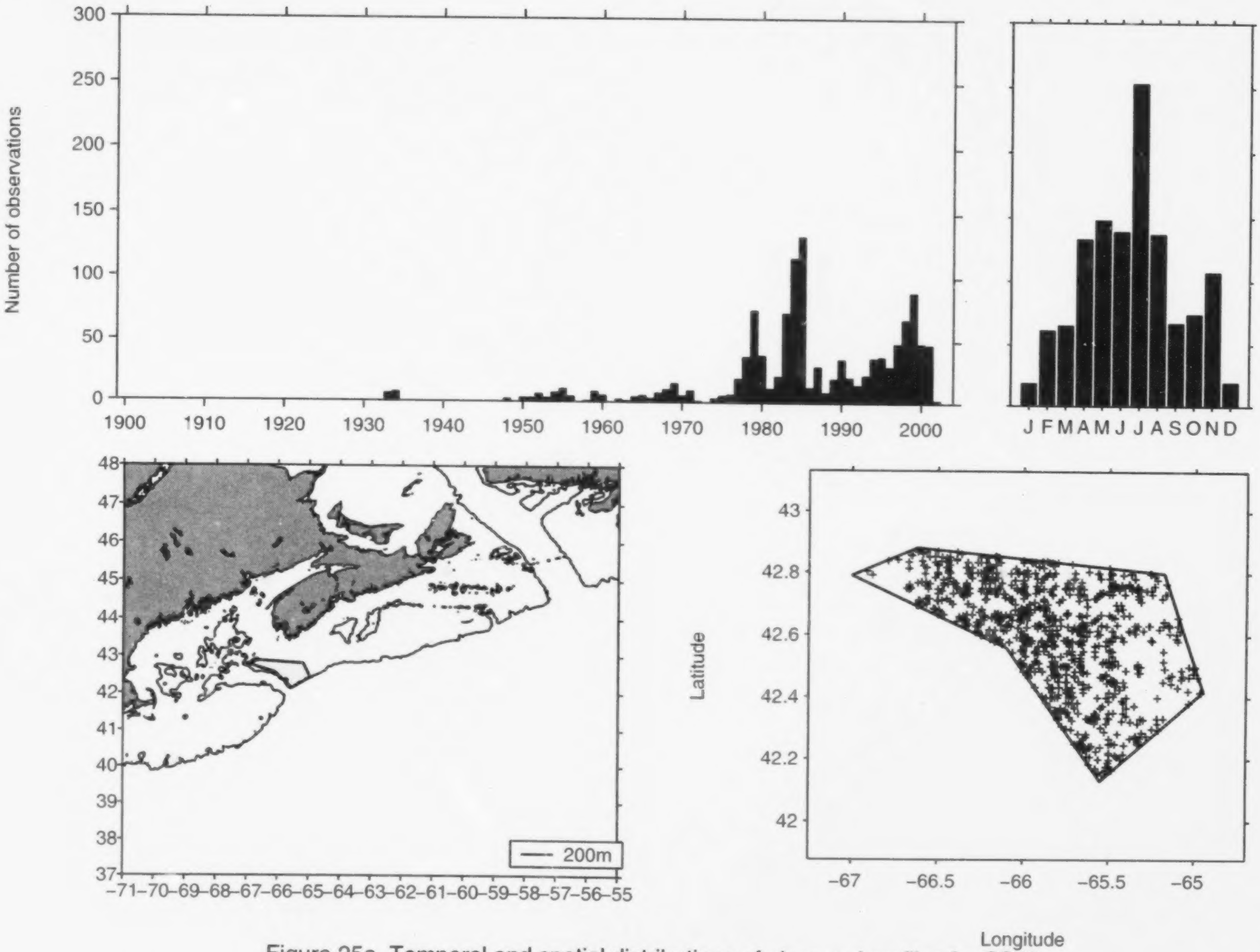

Figure 25a. Temporal and spatial distributions of observed profiles for SS22.

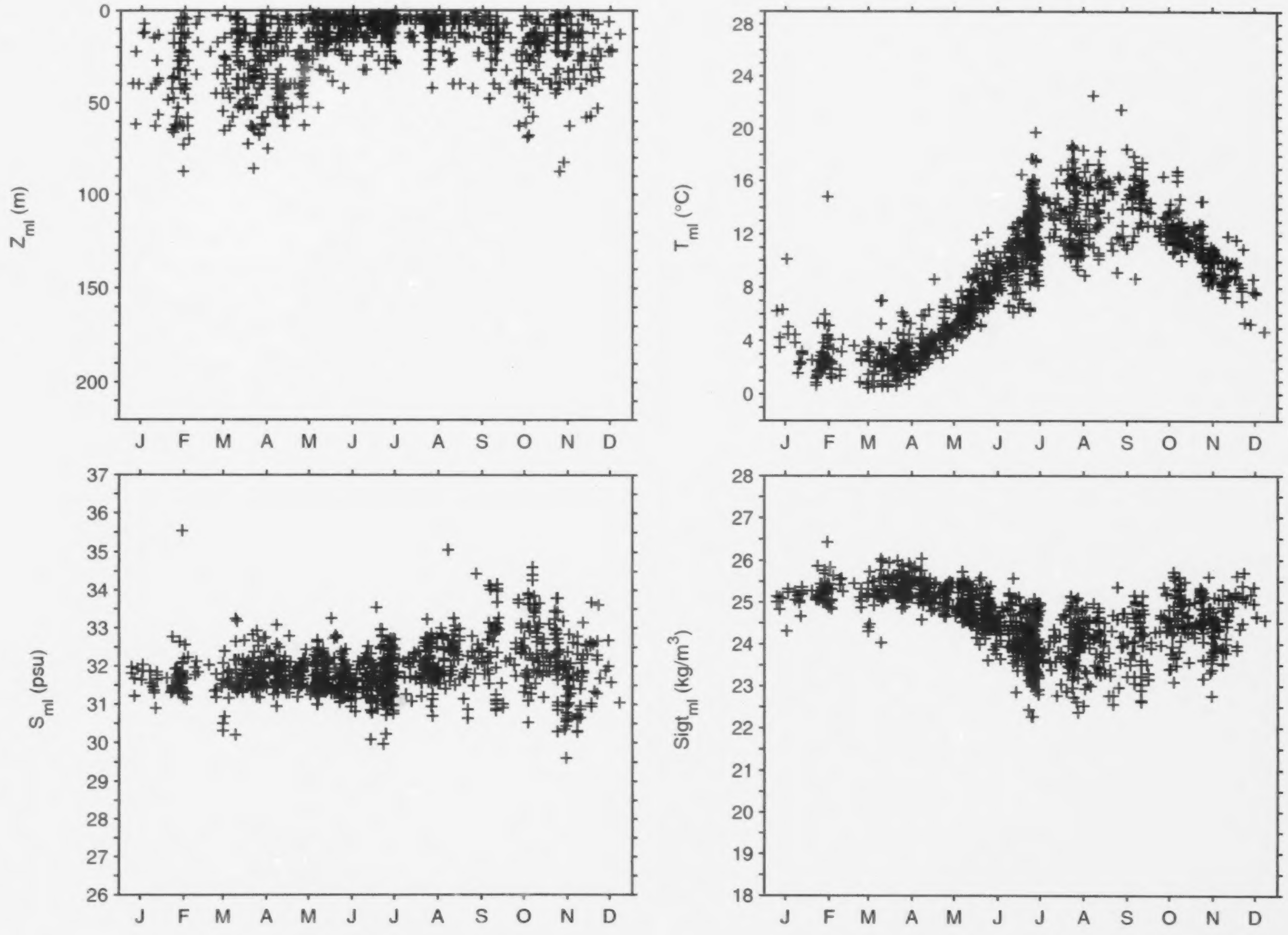

Figure 25b. Calculated mixed layer characteristics for SS22.

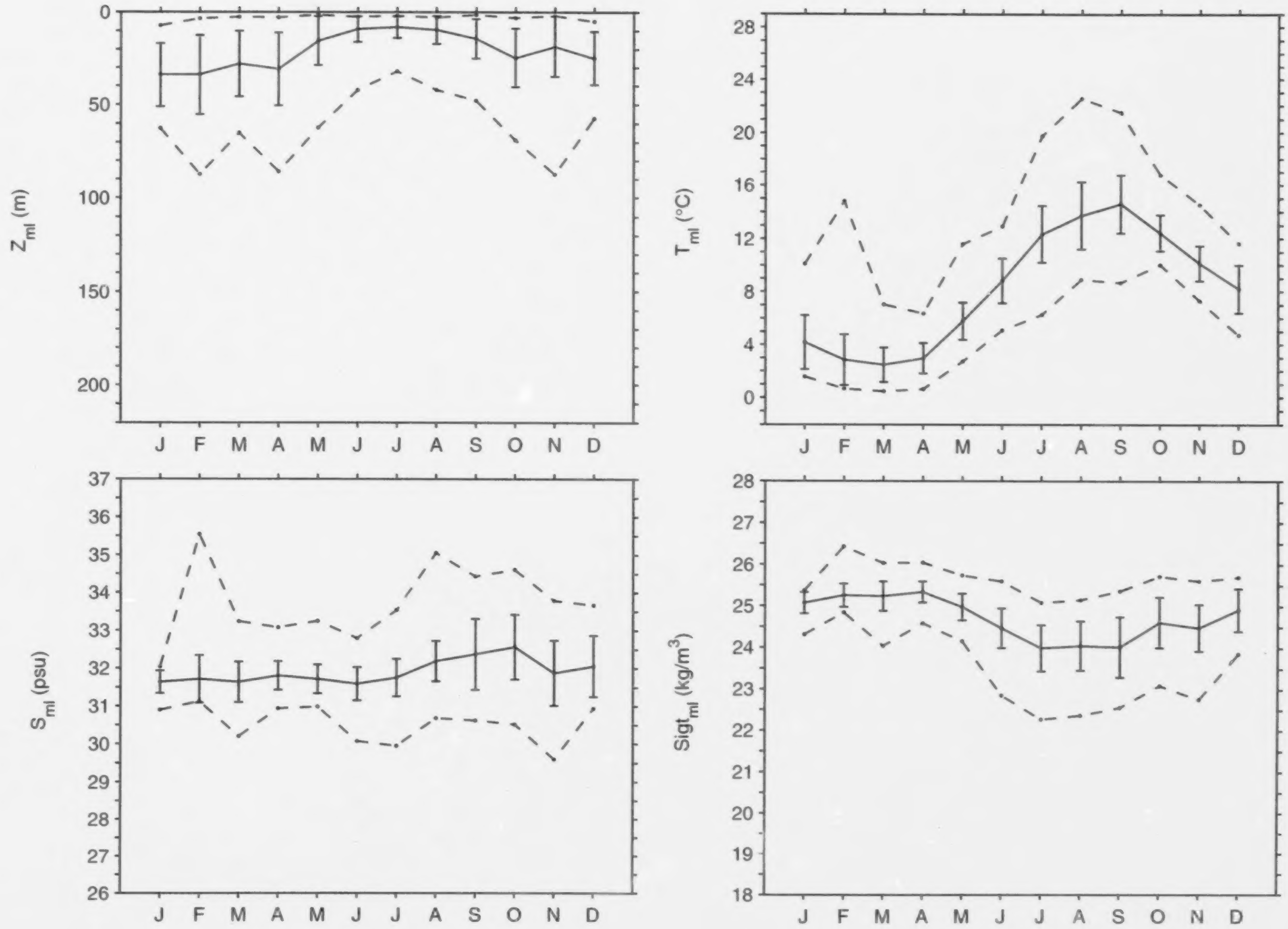

Figure 25c. Monthly statistics of mixed layer characteristics for SS22 (– : mean±sd; –– : min,max).

Table 23. Monthly statistics of mixed layer characteristics for SS22.

Profiles extracted (#) : 1417   Profiles retained (#) : 1221   Profiles rejected (%) : 13.8
Mean seabed depth (m) for subregion : 108.7   Mean sounding depth (m) for profiles : 103.7

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	18	61	61	136	149	139	253	137	67	74	107	19
Mixed layer depth : Z_ml (m)												
mean	33.94	33.84	27.92	30.76	15.40	9.10	8.08	9.54	14.26	24.74	18.52	24.91
median	39.15	31.50	27.00	27.18	12.15	7.50	7.50	7.50	12.50	18.83	14.85	22.50
min	7.25	3.50	2.60	2.90	1.50	2.50	2.00	2.85	1.50	3.15	2.00	5.00
max	62.50	87.50	65.00	86.00	62.25	42.35	32.00	42.15	47.90	68.80	87.50	57.25
s.d.	17.16	21.44	17.84	19.81	13.21	6.82	5.75	7.46	10.60	15.89	16.35	14.42
Mixed layer temperature : T_ml (deg.C)												
mean	4.18	2.86	2.47	2.97	5.78	8.83	12.34	13.73	14.59	12.43	10.14	8.21
median	3.68	2.48	2.36	2.94	5.70	8.65	12.37	13.66	15.02	12.23	10.14	8.31
min	1.57	0.66	0.46	0.62	2.72	5.09	6.27	8.90	8.67	10.03	7.31	4.73
max	10.10	14.80	7.03	6.35	11.60	12.94	19.77	22.56	21.52	16.78	14.52	11.63
s.d.	2.05	1.92	1.31	1.15	1.40	1.69	2.13	2.51	2.17	1.35	1.33	1.80
Mixed layer salinity : S_ml (psu)												
mean	31.64	31.72	31.64	31.81	31.72	31.60	31.76	32.20	32.38	32.57	31.88	32.06
median	31.66	31.62	31.58	31.77	31.64	31.54	31.73	32.20	32.36	32.43	31.95	32.00
min	30.90	31.13	30.20	30.94	30.99	30.08	29.96	30.69	30.63	30.52	29.60	30.95
max	32.04	35.54	33.24	33.08	33.25	32.80	33.54	35.06	34.44	34.61	33.79	33.67
s.d.	0.30	0.63	0.54	0.38	0.38	0.44	0.49	0.53	0.94	0.86	0.86	0.81
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.07	25.25	25.24	25.34	24.98	24.47	23.99	24.05	24.02	24.61	24.48	24.92
median	25.13	25.21	25.20	25.32	24.93	24.44	24.00	24.14	24.16	24.60	24.50	25.08
min	24.31	24.84	24.04	24.58	24.15	22.85	22.27	22.37	22.56	23.09	22.76	23.86
max	25.37	26.43	26.04	26.05	25.74	25.60	25.08	25.15	25.36	25.72	25.61	25.70
s.d.	0.26	0.28	0.36	0.25	0.32	0.48	0.56	0.59	0.72	0.61	0.56	0.51

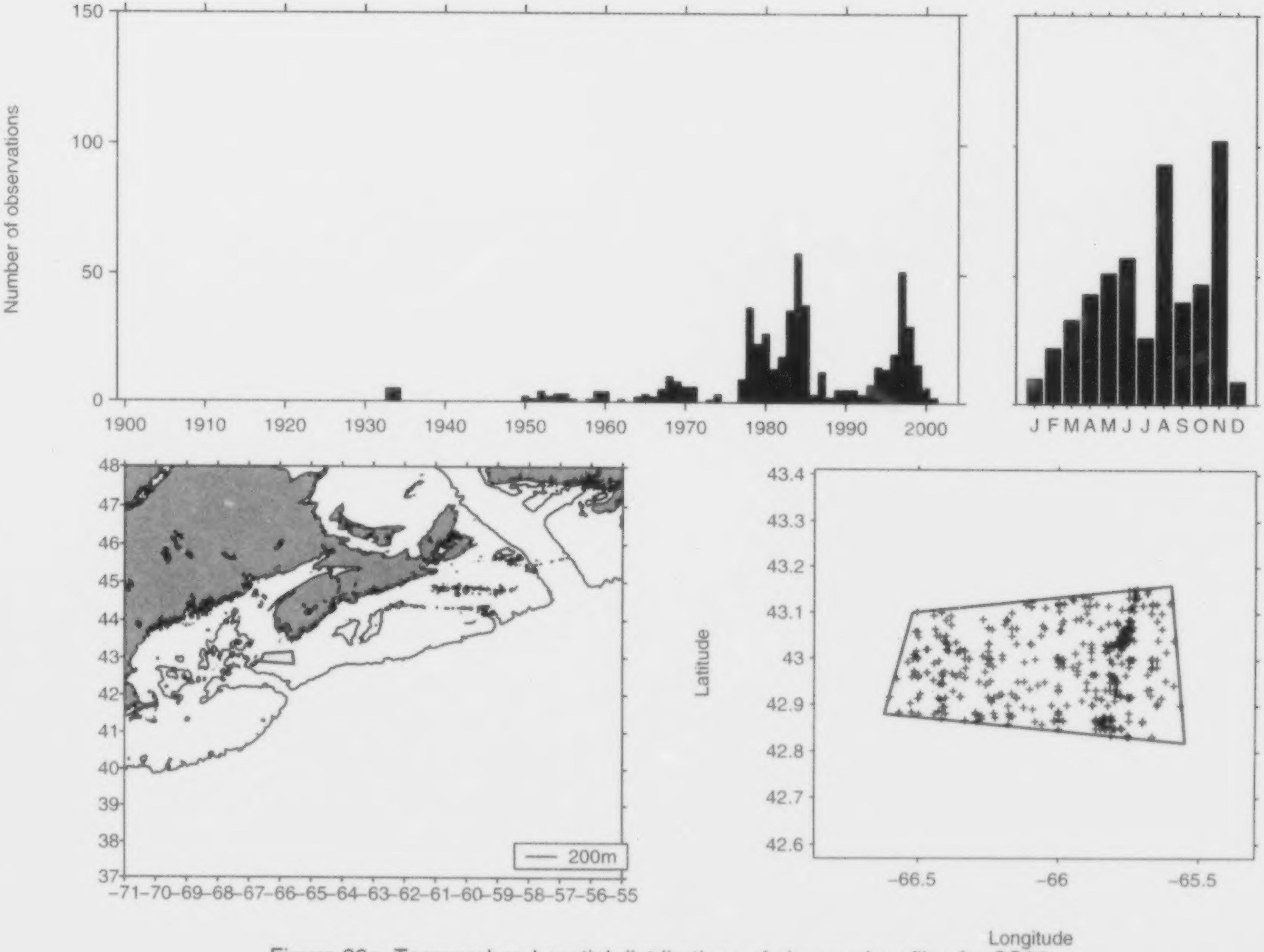

Figure 26a. Temporal and spatial distributions of observed profiles for SS23.

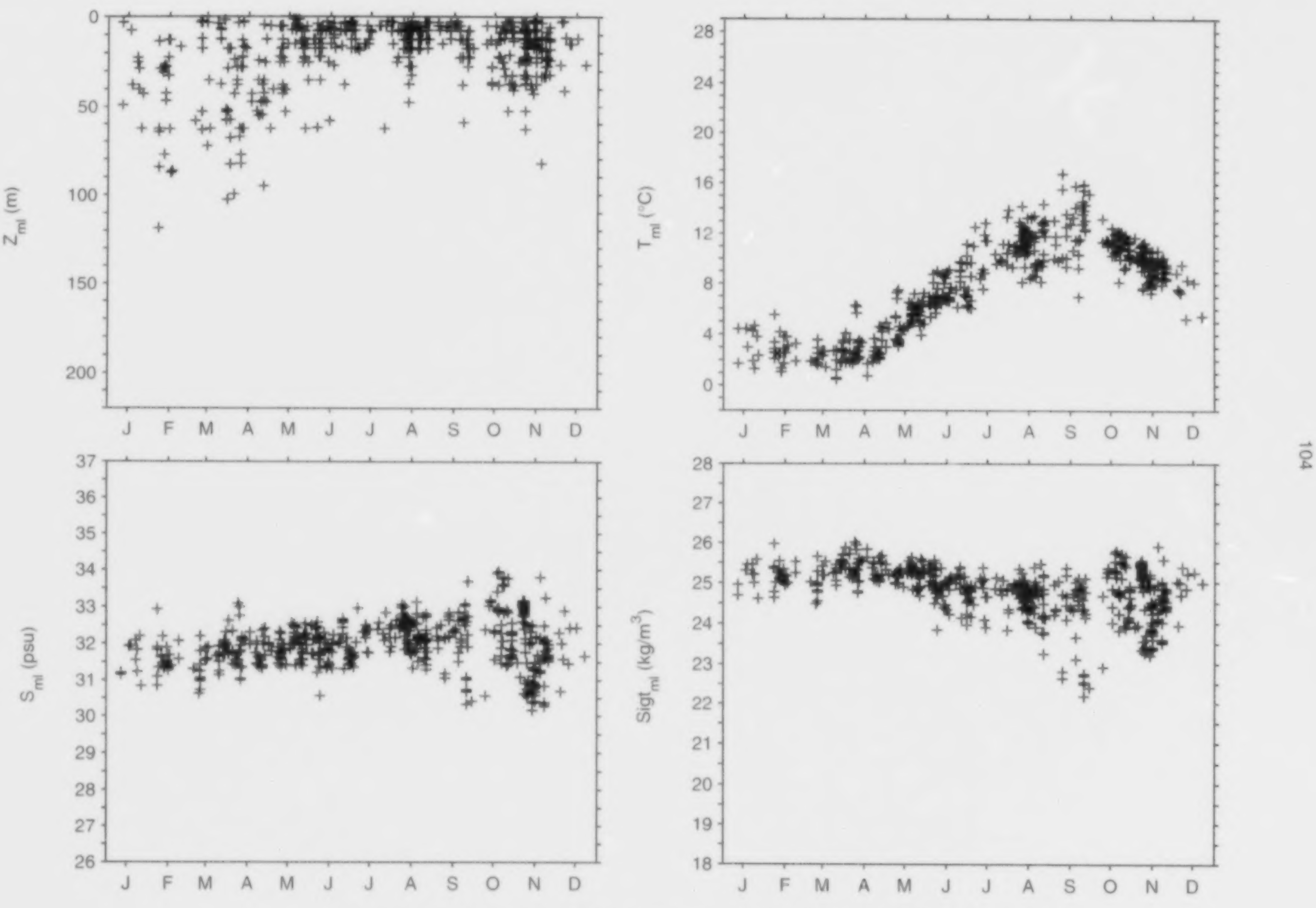

Figure 26b. Calculated mixed layer characteristics for SS23.

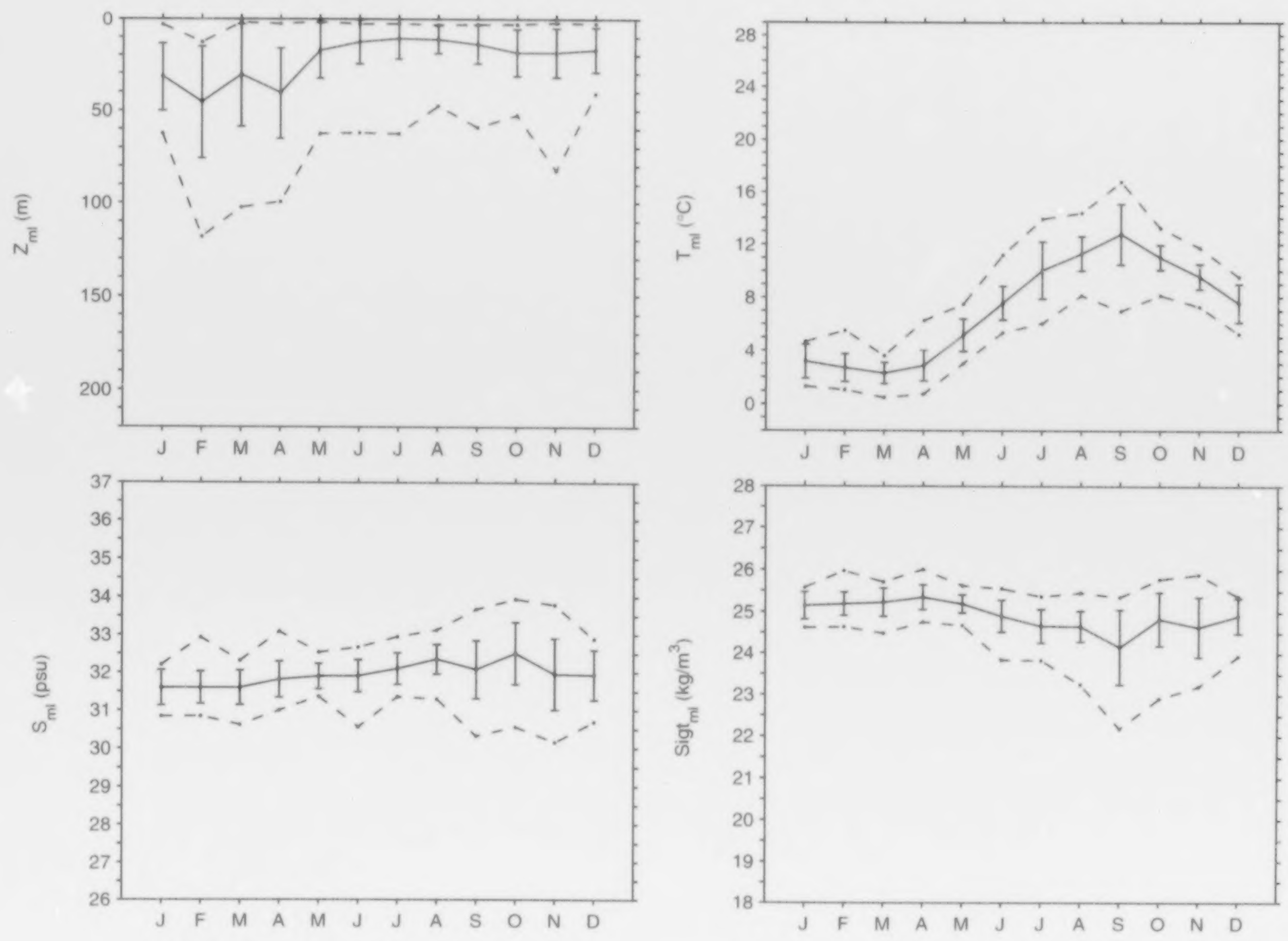

Figure 26c. Monthly statistics of mixed layer characteristics for SS23 (– : mean±sd; -- : min,max).

Table 24. Monthly statistics of mixed layer characteristics for SS23.

Profiles extracted (#) : 650 Profiles retained (#) : 533 Profiles rejected (%) : 18.0
Mean seabed depth (m) for subregion : 118.7 Mean sounding depth (m) for profiles : 117.1

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	10	22	29	46	52	55	28	93	40	47	102	9
Mixed layer depth : Z_ml (m)												
mean	31.81	45.53	30.76	40.59	17.34	12.63	10.69	11.26	13.89	18.54	18.57	17.00
median	33.00	31.43	17.55	37.38	12.93	7.90	7.50	7.55	12.50	13.50	15.00	15.00
min	3.15	12.80	1.85	2.65	1.50	2.75	2.50	3.10	3.00	2.90	2.00	2.50
max	62.50	118.50	102.60	99.50	62.50	62.00	62.50	47.50	59.00	52.50	82.50	41.00
s.d.	18.28	30.31	27.93	24.54	15.39	12.18	11.33	7.74	10.79	12.96	13.55	12.38
Mixed layer temperature : T_ml (deg.C)												
mean	3.18	2.70	2.29	2.86	5.16	7.57	10.04	11.30	12.78	11.01	9.57	7.56
median	3.39	2.56	2.34	2.54	5.35	7.09	9.88	11.51	12.81	11.10	9.77	7.62
min	1.30	1.07	0.49	0.76	3.01	5.35	6.04	8.13	6.97	8.14	7.29	5.25
max	4.66	5.51	3.59	6.25	7.50	11.19	13.93	14.39	16.78	13.23	11.74	9.56
s.d.	1.28	1.05	0.80	1.16	1.22	1.27	2.15	1.29	2.31	0.93	0.94	1.44
Mixed layer salinity : S_ml (psu)												
mean	31.60	31.60	31.60	31.82	31.90	31.92	32.11	32.36	32.09	32.51	31.96	31.94
median	31.69	31.49	31.70	31.74	31.93	31.90	32.16	32.50	32.20	32.38	32.00	32.00
min	30.84	30.84	30.62	31.00	31.37	30.56	31.36	31.30	30.33	30.56	30.16	30.69
max	32.20	32.93	32.31	33.09	32.54	32.67	32.96	33.13	33.68	33.95	33.80	32.89
s.d.	0.47	0.43	0.46	0.47	0.33	0.43	0.41	0.39	0.77	0.83	0.95	0.66
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.14	25.19	25.23	25.35	25.19	24.90	24.67	24.66	24.16	24.83	24.64	24.92
median	25.21	25.17	25.28	25.34	25.22	24.93	24.80	24.73	24.37	24.84	24.81	24.99
min	24.61	24.63	24.48	24.75	24.68	23.84	23.83	23.25	22.19	22.91	23.21	23.94
max	25.58	25.97	25.71	26.01	25.63	25.56	25.37	25.46	25.36	25.78	25.90	25.38
s.d.	0.33	0.28	0.34	0.30	0.22	0.38	0.41	0.37	0.91	0.64	0.72	0.42

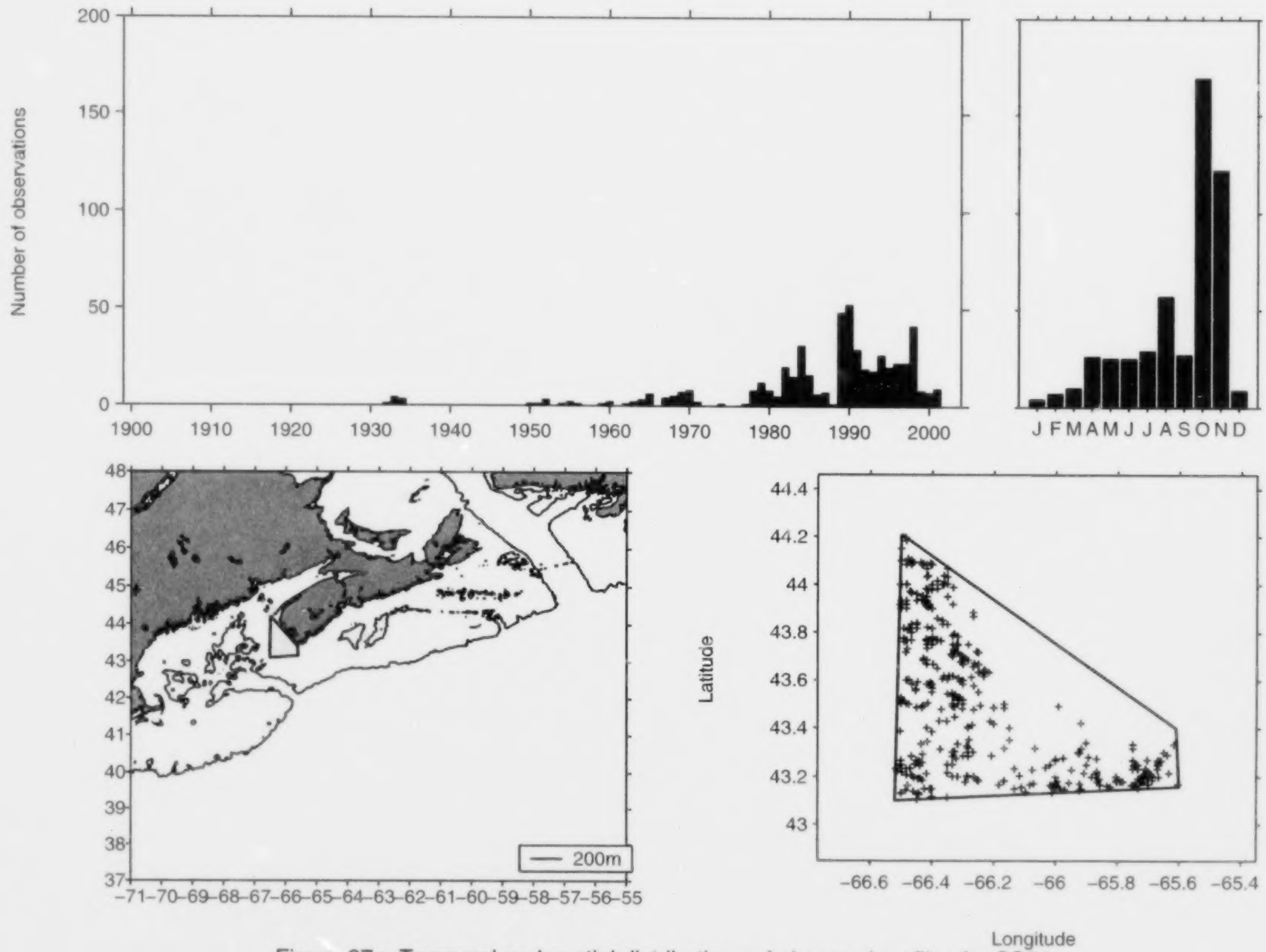

Figure 27a. Temporal and spatial distributions of observed profiles for SS24.

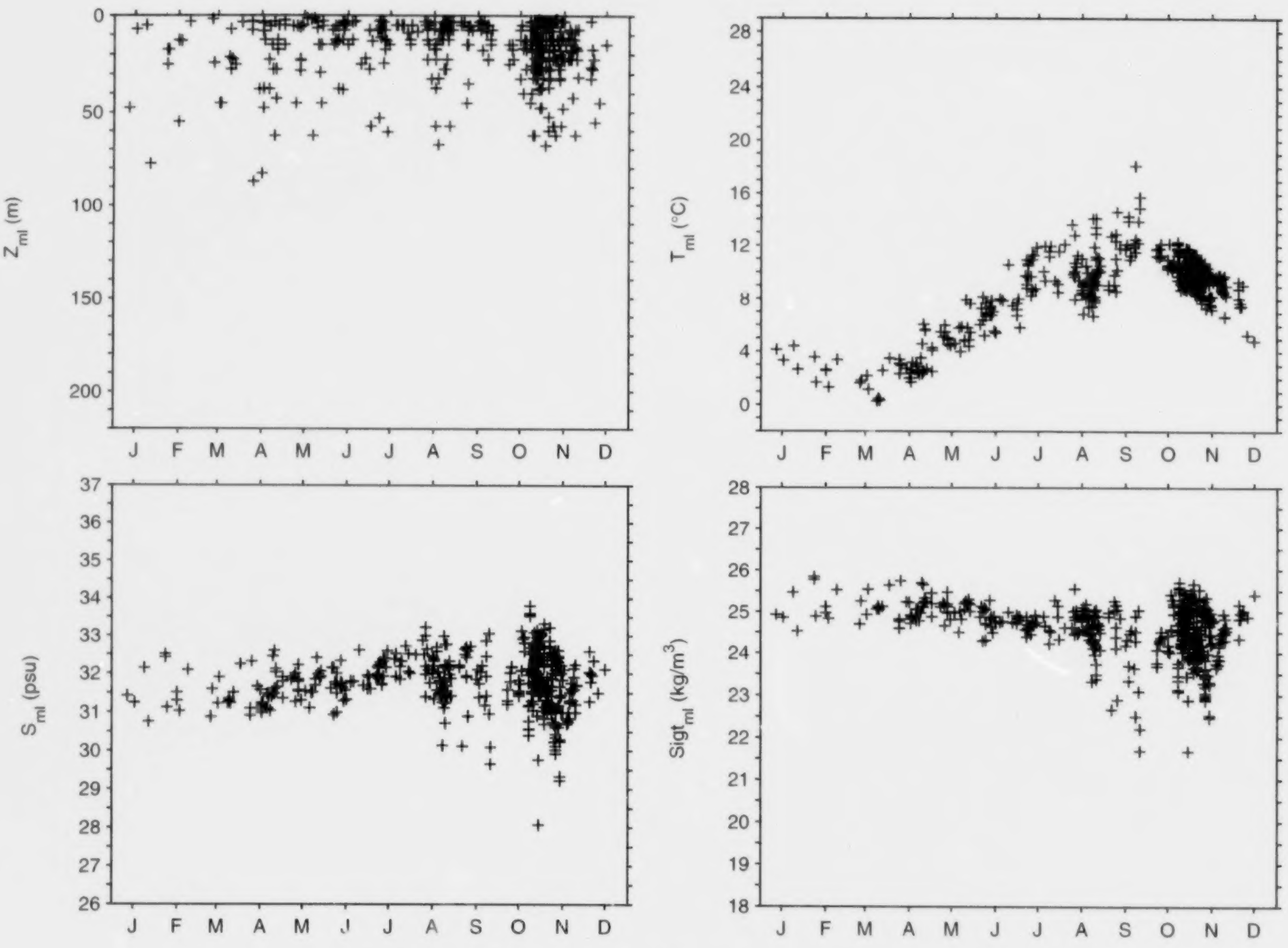

Figure 27b. Calculated mixed layer characteristics for SS24.

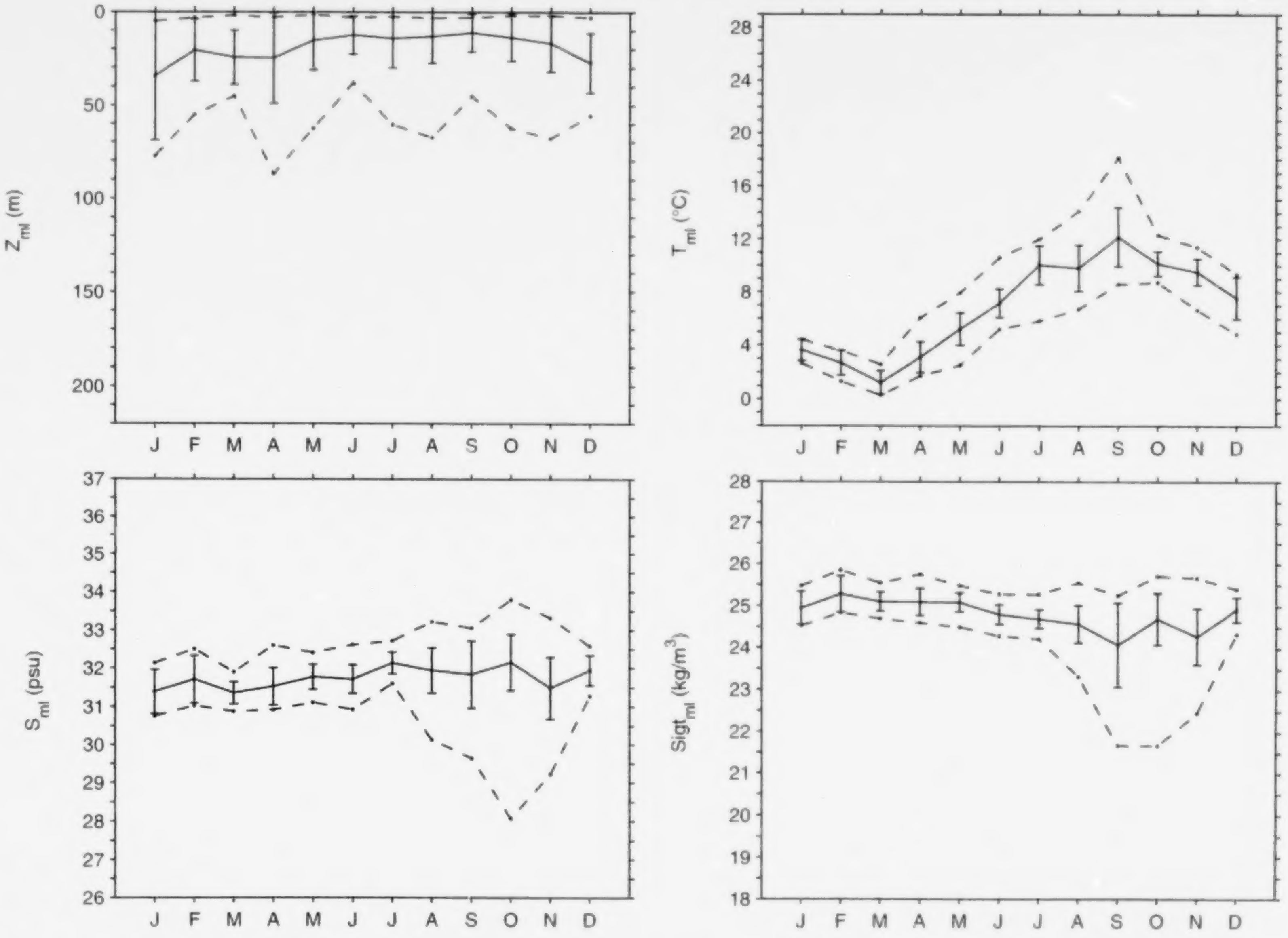

Figure 27c. Monthly statistics of mixed layer characteristics for SS24 (– : mean±sd; –– : min,max).

Table 25. Monthly statistics of mixed layer characteristics for SS24.

Profiles extracted (#) : 961 Profiles retained (#) : 510 Profiles rejected (%) : 46.9
Mean seabed depth (m) for subregion : 50.5 Mean sounding depth (m) for profiles : 70.5

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	4	7	9	26	26	25	29	57	27	169	122	9
Mixed layer depth : Z_ml (m)												
mean	34.25	20.58	24.34	24.76	15.24	12.46	14.18	13.15	11.18	13.68	16.82	27.22
median	27.25	17.50	24.25	16.25	6.30	7.75	7.50	7.50	7.50	8.00	12.78	26.50
min	5.00	3.25	1.85	3.00	1.50	3.00	2.50	3.25	3.00	2.00	2.00	3.00
max	77.50	55.00	45.00	87.00	62.50	38.00	60.50	67.45	45.00	62.50	68.00	55.50
s.d.	NaN	16.54	14.50	24.10	15.85	10.18	15.73	14.34	10.14	12.59	15.10	15.80
Mixed layer temperature : T_ml (deg.C)												
mean	3.63	2.68	1.23	3.11	5.22	7.17	10.05	9.82	12.18	10.16	9.53	7.57
median	3.74	2.65	1.16	2.73	4.91	7.23	10.10	9.63	12.14	10.28	9.71	7.72
min	2.66	1.33	0.30	1.73	2.52	5.22	5.84	6.72	8.61	8.73	6.67	4.85
max	4.40	3.58	2.59	6.07	7.93	10.59	12.00	14.12	18.12	12.33	11.41	9.35
s.d.	NaN	0.91	0.87	1.14	1.21	1.08	1.46	1.75	2.24	0.92	0.99	1.58
Mixed layer salinity : S_ml (psu)												
mean	31.39	31.71	31.36	31.53	31.78	31.72	32.14	31.94	31.84	32.15	31.49	31.95
median	31.33	31.51	31.29	31.44	31.84	31.69	32.16	31.98	32.03	32.24	31.53	32.00
min	30.76	31.03	30.88	30.92	31.11	30.93	31.60	30.14	29.65	28.07	29.22	31.28
max	32.14	32.51	31.90	32.60	32.41	32.62	32.72	33.22	33.06	33.80	33.32	32.58
s.d.	NaN	0.62	0.29	0.49	0.33	0.37	0.28	0.59	0.88	0.74	0.80	0.40
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	24.95	25.28	25.10	25.09	25.09	24.80	24.70	24.58	24.08	24.70	24.28	24.93
median	24.89	25.12	25.09	25.06	25.16	24.77	24.69	24.62	24.38	24.86	24.34	24.95
min	24.53	24.84	24.70	24.59	24.50	24.29	24.22	23.32	21.69	21.68	22.47	24.34
max	25.47	25.85	25.54	25.74	25.48	25.28	25.28	25.55	25.26	25.71	25.67	25.41
s.d.	NaN	0.43	0.23	0.32	0.22	0.23	0.22	0.44	1.00	0.61	0.67	0.29

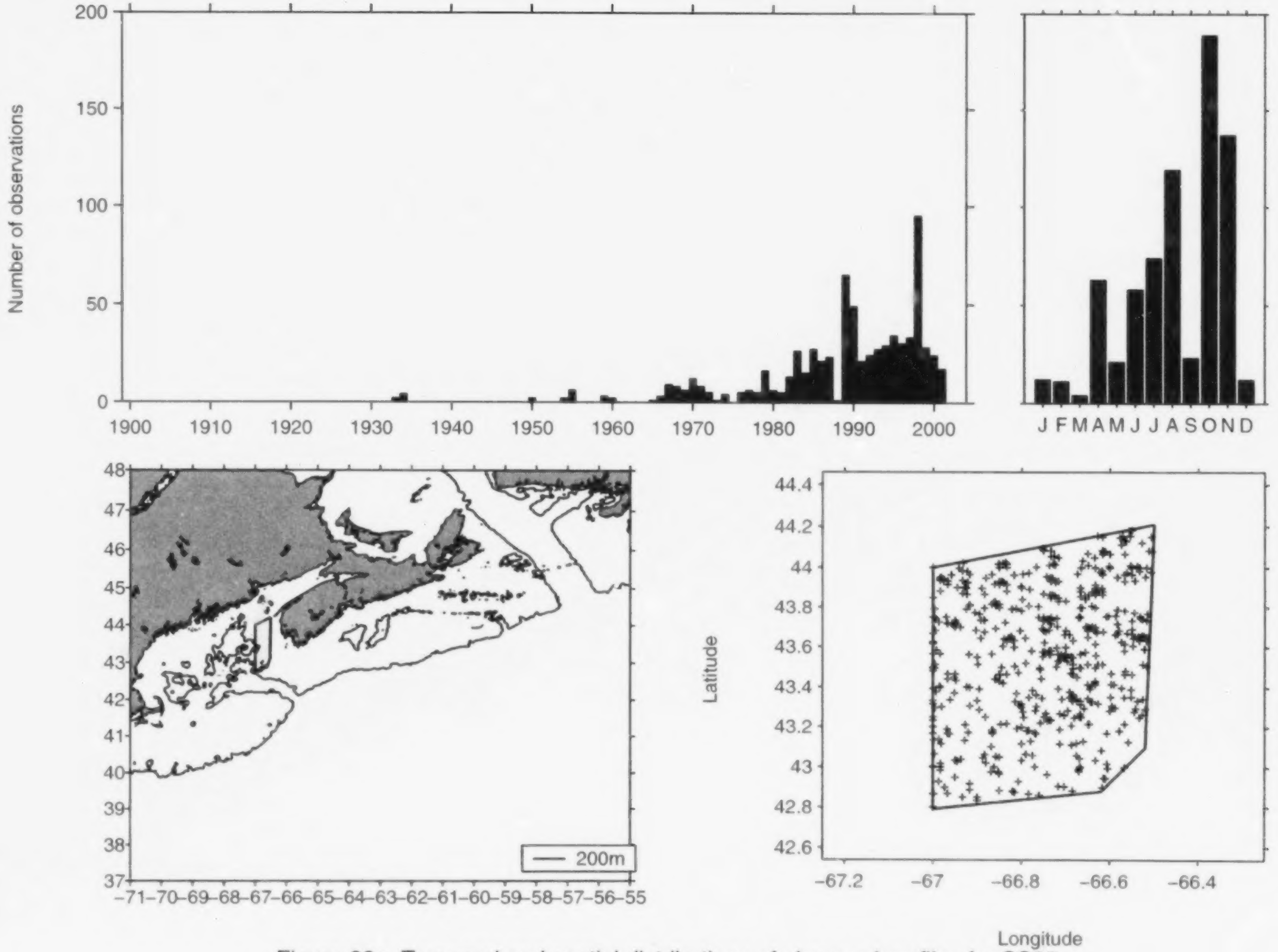

Figure 28a. Temporal and spatial distributions of observed profiles for SS25.

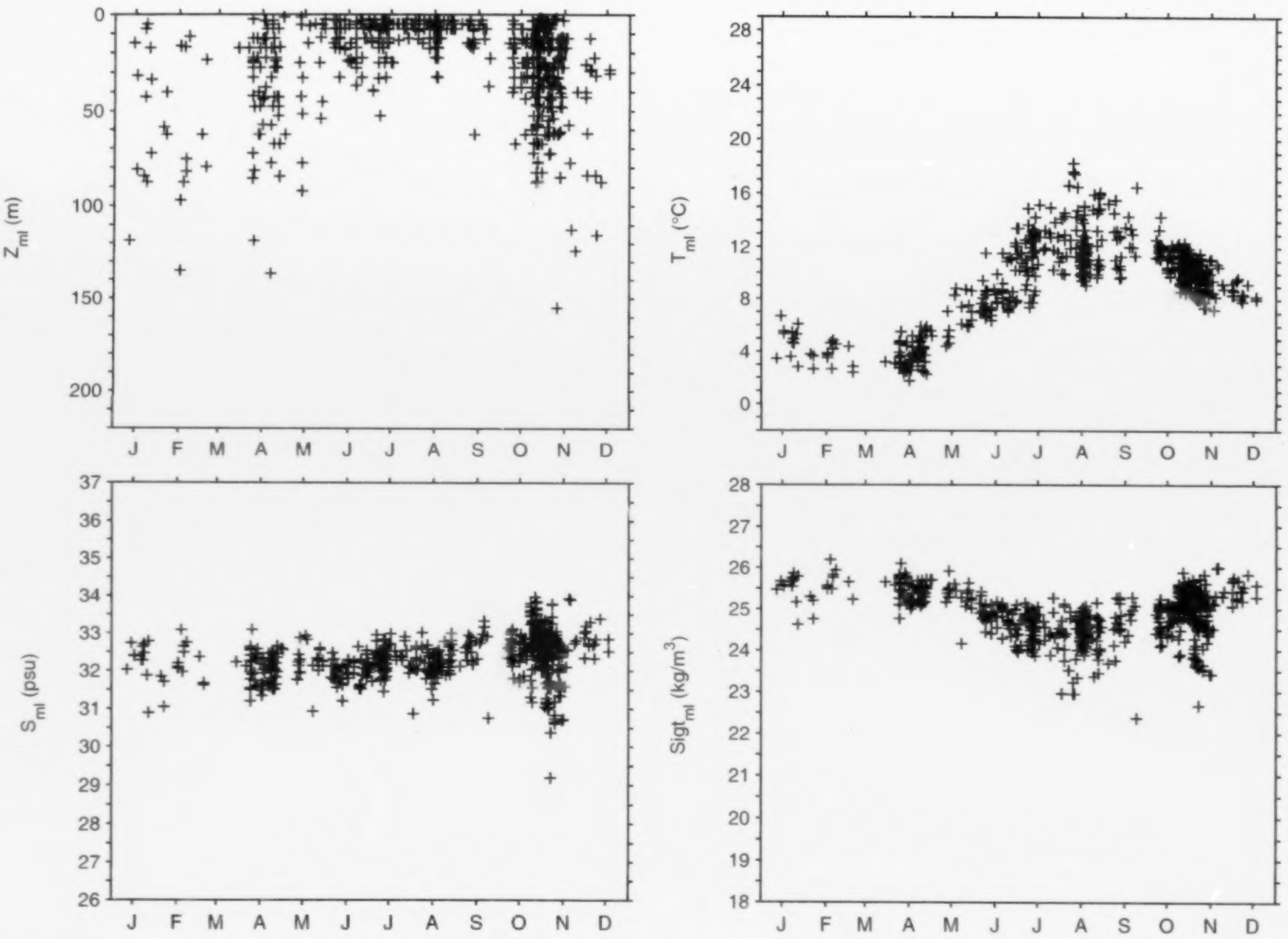

Figure 28b. Calculated mixed layer characteristics for SS25.

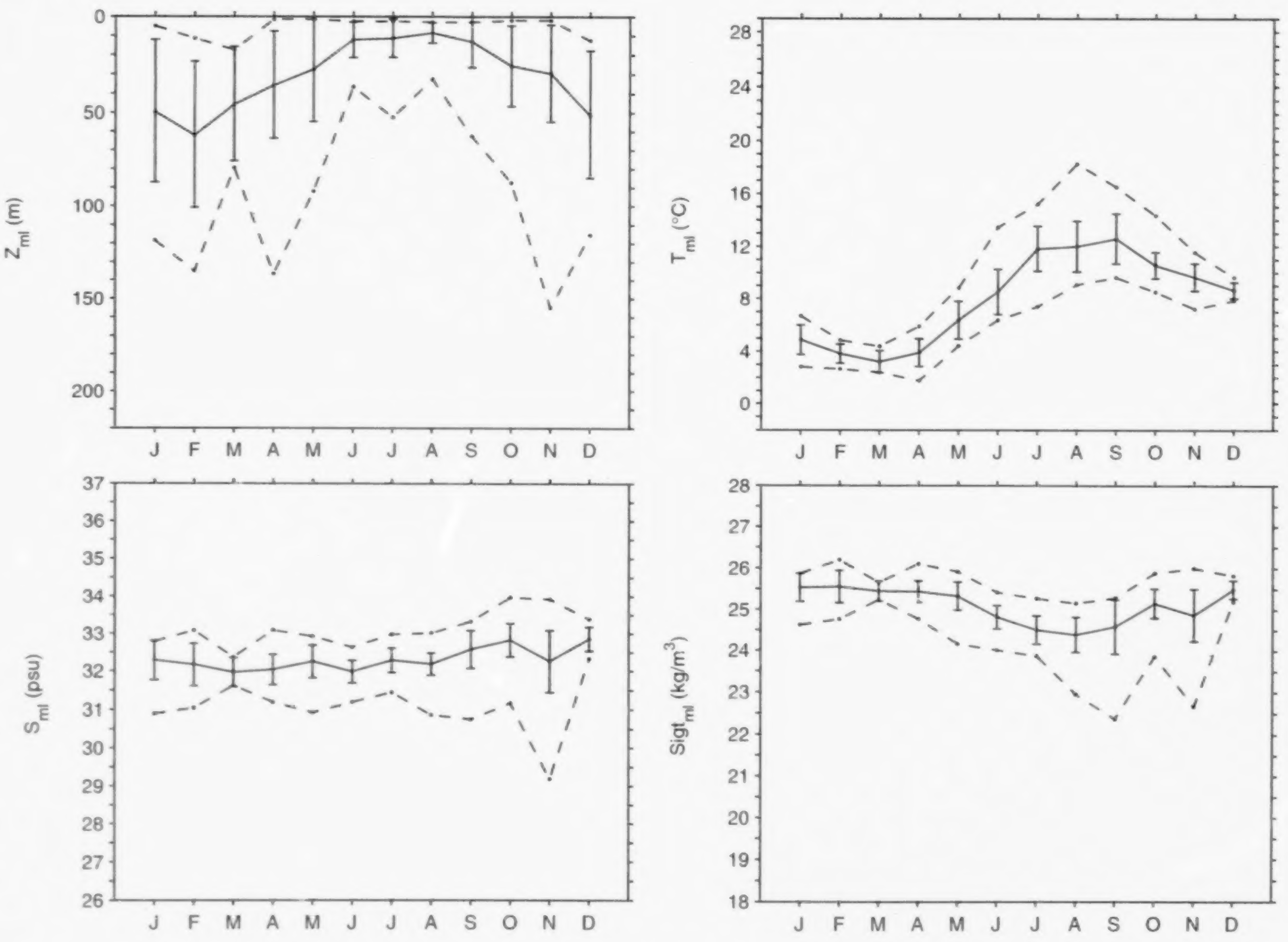

Figure 28c. Monthly statistics of mixed layer characteristics for SS25 (– : mean±sd; –– : min,max).

Table 26. Monthly statistics of mixed layer characteristics for SS25.

Profiles extracted (#) : 854   Profiles retained (#) : 723   Profiles rejected (%) : 15.3
Mean seabed depth (m) for subregion : 134.2   Mean sounding depth (m) for profiles : 137.9

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	12	11	4	63	21	57	72	122	23	188	138	12
Mixed layer depth : Z_ml (m)												
mean	49.70	62.09	45.75	35.70	27.42	12.17	11.35	8.56	13.19	25.71	29.53	51.33
median	38.00	62.50	43.00	27.50	15.00	7.50	7.50	7.53	7.65	22.50	27.50	31.00
min	5.00	11.50	17.50	1.50	1.50	2.50	2.50	2.90	3.00	2.00	2.00	12.50
max	118.50	135.00	79.50	136.50	92.05	36.50	52.50	32.50	62.50	87.50	155.00	115.50
s.d.	37.59	38.64	NaN	28.00	27.28	9.21	9.92	5.35	13.27	20.84	25.22	33.55
Mixed layer temperature : T_ml (deg.C)												
mean	4.88	3.84	3.22	3.91	6.38	8.53	11.82	12.00	12.58	10.56	9.66	8.64
median	5.13	3.80	3.04	3.84	6.06	7.92	12.34	11.40	12.77	10.45	9.86	8.38
min	2.82	2.66	2.40	1.76	4.43	6.38	7.39	9.07	9.62	8.51	7.21	7.85
max	6.68	4.85	4.39	5.91	8.82	13.46	15.20	18.25	16.49	14.34	11.55	9.64
s.d.	1.12	0.73	NaN	1.05	1.42	1.73	1.72	1.92	1.89	1.00	1.05	0.63
Mixed layer salinity : S_ml (psu)												
mean	32.29	32.17	31.97	32.04	32.26	31.99	32.29	32.19	32.59	32.83	32.27	32.86
median	32.40	32.11	31.95	32.09	32.27	32.05	32.31	32.13	32.69	32.88	32.40	32.79
min	30.89	31.04	31.62	31.20	30.93	31.20	31.45	30.87	30.76	31.17	29.19	32.33
max	32.78	33.08	32.37	33.09	32.93	32.64	32.98	33.02	33.33	33.97	33.93	33.39
s.d.	0.52	0.56	NaN	0.40	0.44	0.30	0.32	0.30	0.50	0.45	0.82	0.32
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.53	25.55	25.45	25.44	25.33	24.82	24.51	24.39	24.59	25.16	24.87	25.49
median	25.62	25.51	25.45	25.45	25.39	24.87	24.52	24.44	24.67	25.24	25.03	25.49
min	24.62	24.76	25.24	24.77	24.16	24.01	23.87	22.95	22.38	23.86	22.67	25.20
max	25.86	26.19	25.66	26.10	25.92	25.42	25.27	25.16	25.29	25.89	26.01	25.83
s.d.	0.34	0.39	NaN	0.26	0.34	0.28	0.34	0.43	0.66	0.36	0.64	0.22

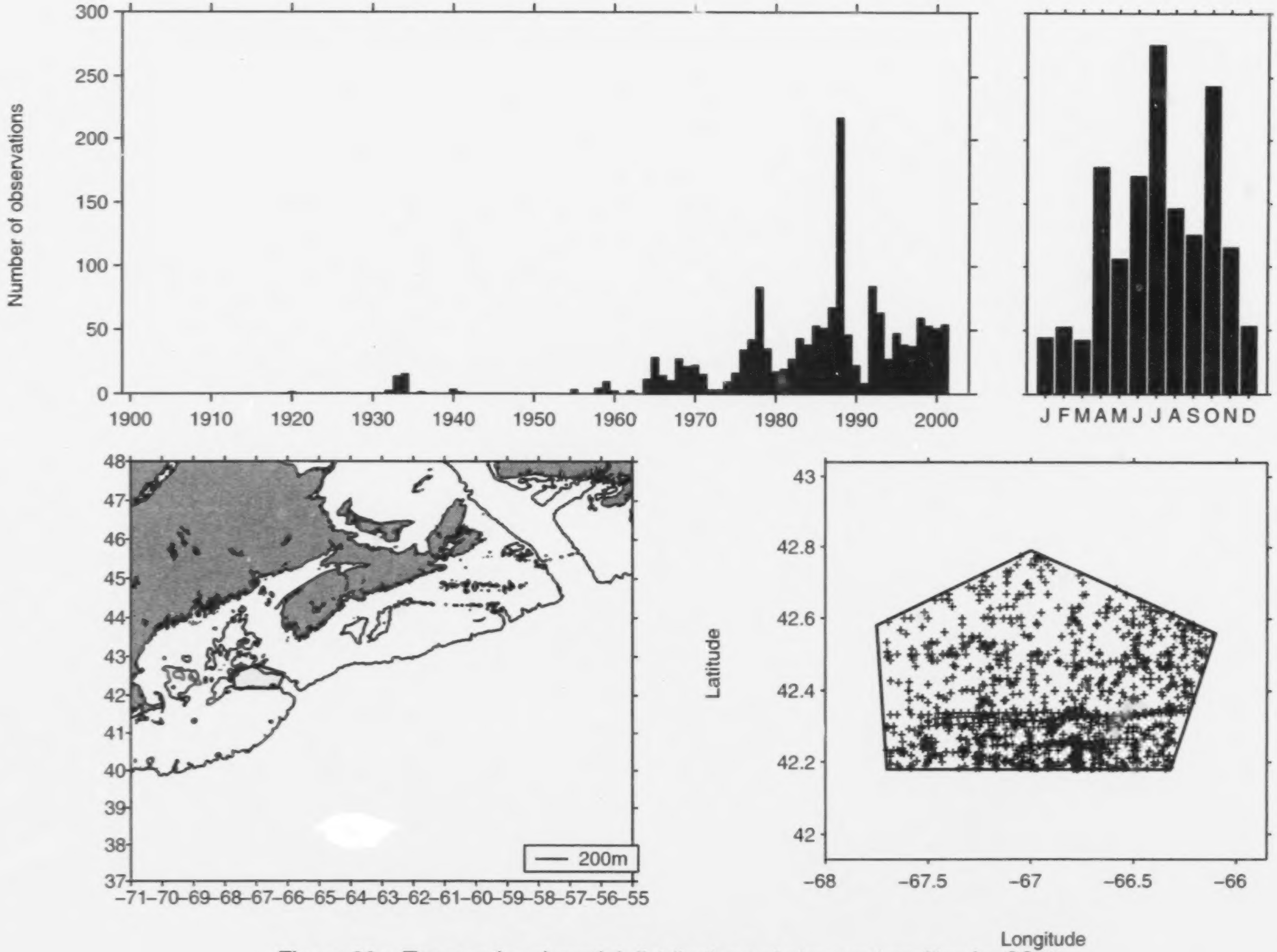

Figure 29a. Temporal and spatial distributions of observed profiles for SS26.

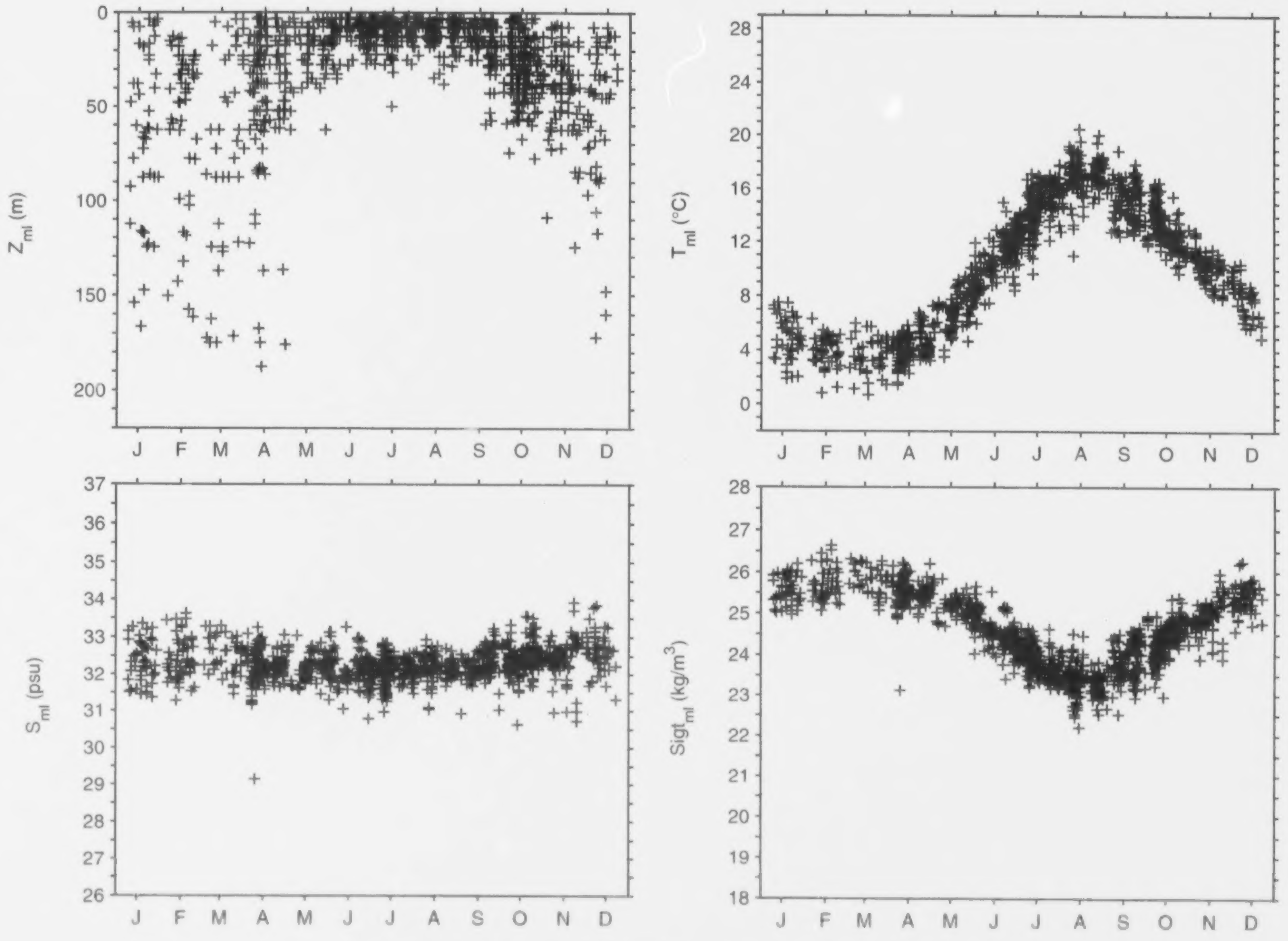

Figure 29b. Calculated mixed layer characteristics for SS26.

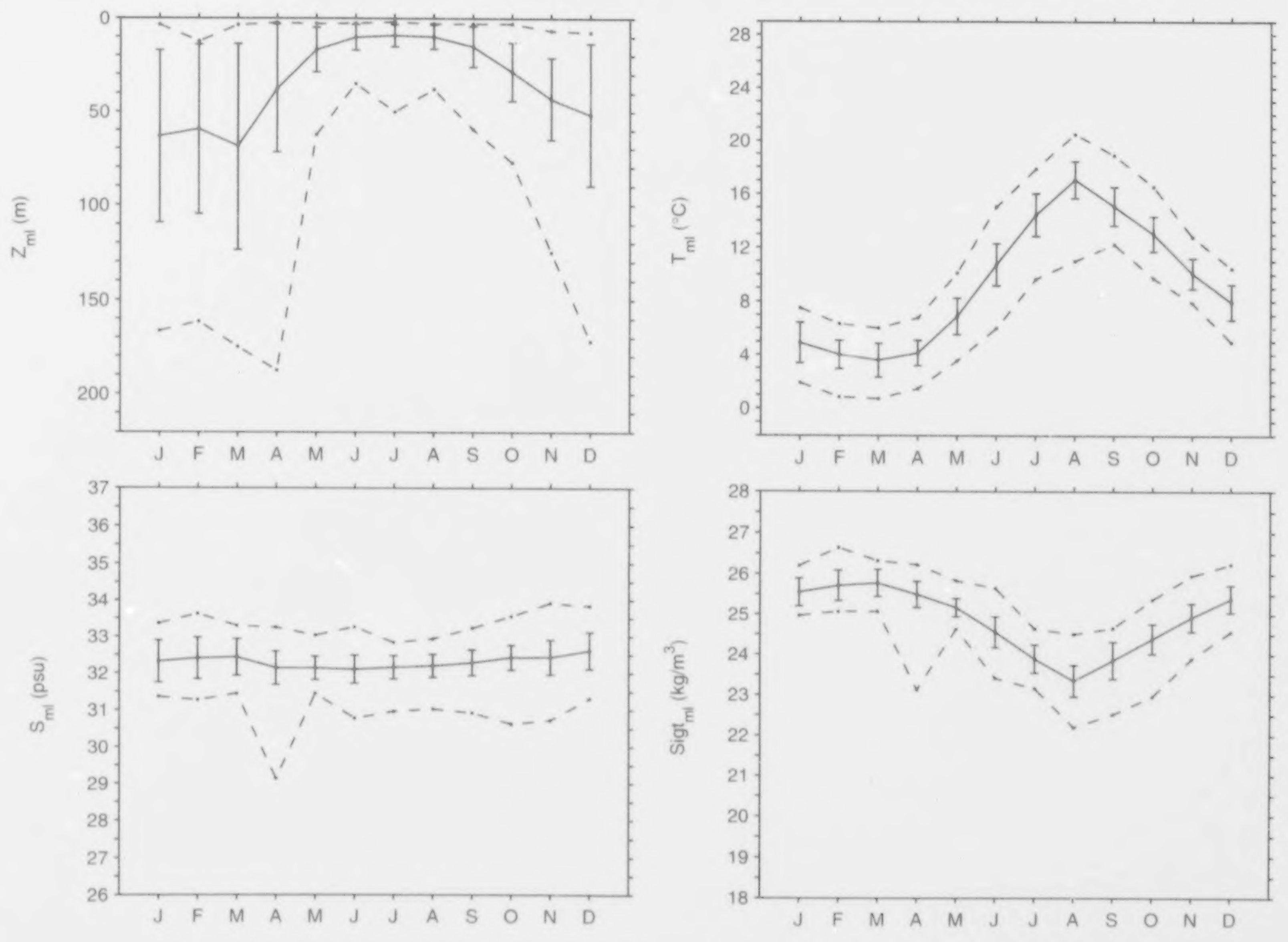

Figure 29c. Monthly statistics of mixed layer characteristics for SS26 (– : mean±sd; –– : min,max).

Table 27. Monthly statistics of mixed layer characteristics for SS26.

Profiles extracted (#) : 1808 Profiles retained (#) : 1550 Profiles rejected (%) : 14.3
Mean seabed depth (m) for subregion : 253.4 Mean sounding depth (m) for profiles : 243.9

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	44	52	42	178	106	168	278	144	127	243	115	53
Mixed layer depth : Z_ml (m)												
mean	63.22	59.39	68.77	37.59	16.87	10.16	9.25	9.94	15.17	28.61	43.13	51.59
median	61.75	40.50	62.50	28.25	15.00	7.75	7.60	7.62	13.00	27.50	41.95	42.50
min	3.50	12.50	3.65	2.50	3.00	2.75	2.00	3.00	2.95	3.00	6.70	7.50
max	166.50	161.50	175.00	187.65	62.50	35.00	50.00	37.90	59.50	77.50	125.00	172.00
s.d.	45.94	45.36	54.94	34.38	11.93	6.88	5.94	6.51	10.88	15.46	21.98	38.15
Mixed layer temperature : T_ml (deg.C)												
mean	4.90	4.00	3.59	4.13	6.90	10.73	14.44	17.05	15.07	13.01	10.07	7.95
median	4.83	4.23	3.45	4.03	7.06	10.87	14.49	17.15	15.13	12.65	10.13	8.18
min	1.88	0.82	0.70	1.44	3.53	6.01	9.65	10.99	12.23	9.73	7.90	4.96
max	7.51	6.32	6.00	6.78	10.10	15.04	17.86	20.50	18.88	16.52	12.79	10.44
s.d.	1.53	1.07	1.27	0.96	1.37	1.56	1.59	1.37	1.43	1.31	1.13	1.31
Mixed layer salinity : S_ml (psu)												
mean	32.32	32.41	32.44	32.15	32.14	32.11	32.16	32.20	32.29	32.43	32.44	32.62
median	32.31	32.31	32.34	32.15	32.14	32.09	32.20	32.19	32.27	32.44	32.47	32.66
min	31.36	31.27	31.45	29.14	31.45	30.78	30.96	31.03	30.92	30.62	30.72	31.31
max	33.36	33.63	33.30	33.25	33.04	33.27	32.84	32.94	33.23	33.56	33.92	33.84
s.d.	0.57	0.57	0.50	0.45	0.32	0.38	0.31	0.31	0.35	0.34	0.47	0.50
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.55	25.72	25.78	25.50	25.17	24.56	23.89	23.35	23.86	24.39	24.93	25.40
median	25.48	25.63	25.80	25.48	25.19	24.53	23.87	23.36	23.84	24.46	24.91	25.42
min	24.97	25.06	25.07	23.12	24.63	23.41	23.16	22.20	22.52	22.96	23.89	24.57
max	26.20	26.64	26.32	26.23	25.84	25.65	24.64	24.51	24.66	25.38	25.97	26.25
s.d.	0.35	0.38	0.33	0.33	0.23	0.39	0.35	0.39	0.46	0.37	0.36	0.34

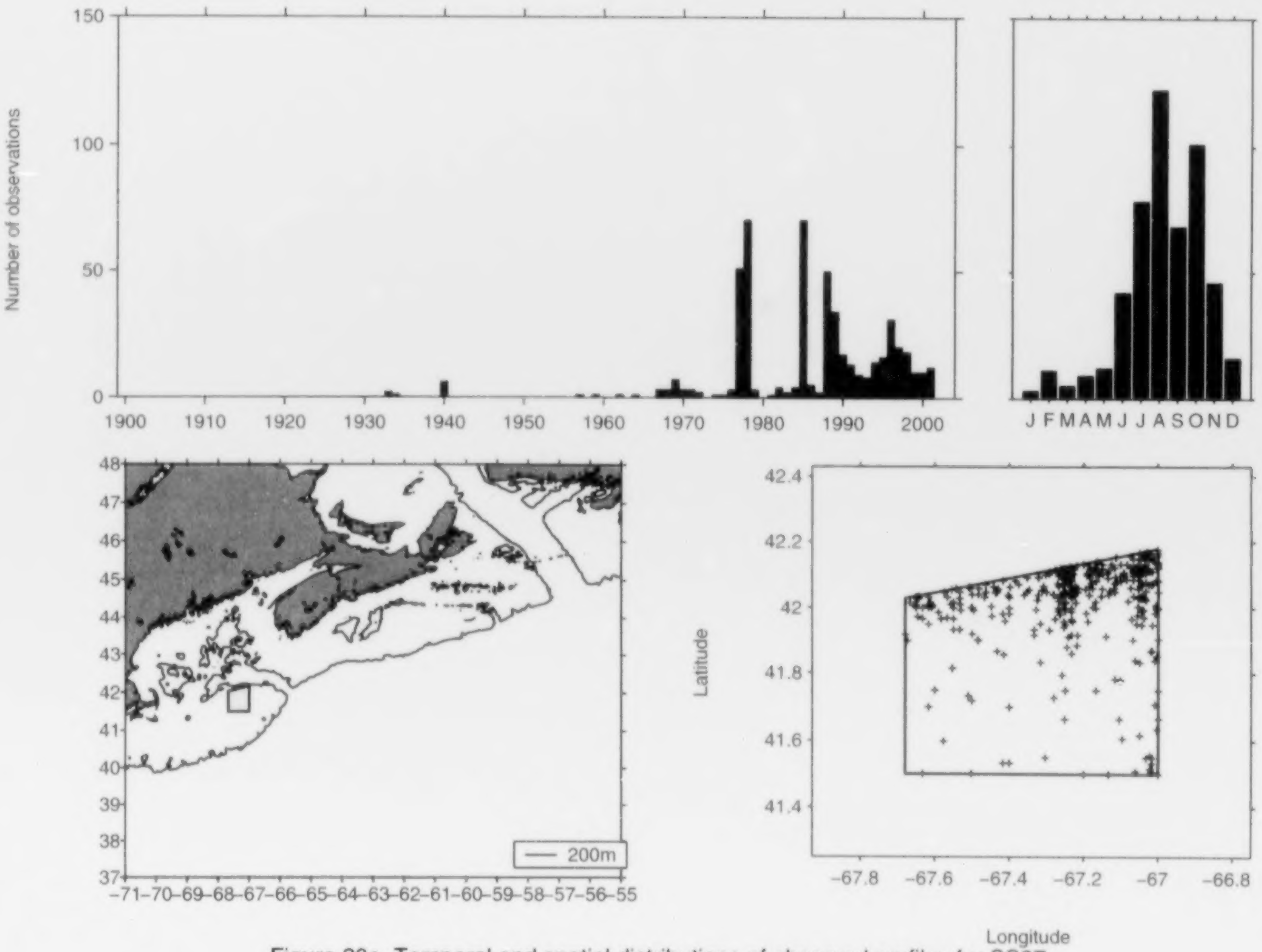

Figure 30a. Temporal and spatial distributions of observed profiles for SS27.

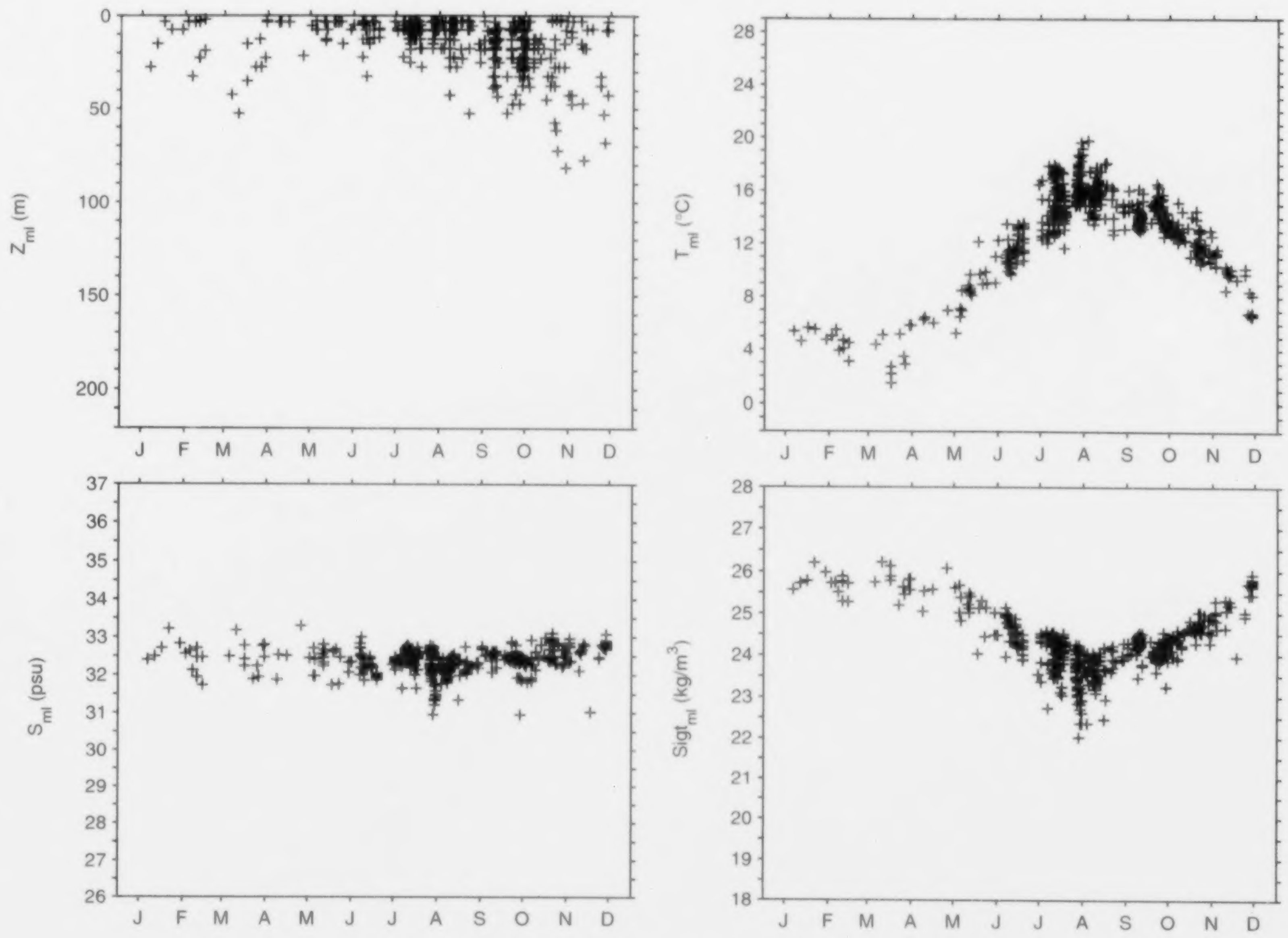

Figure 30b. Calculated mixed layer characteristics for SS27.

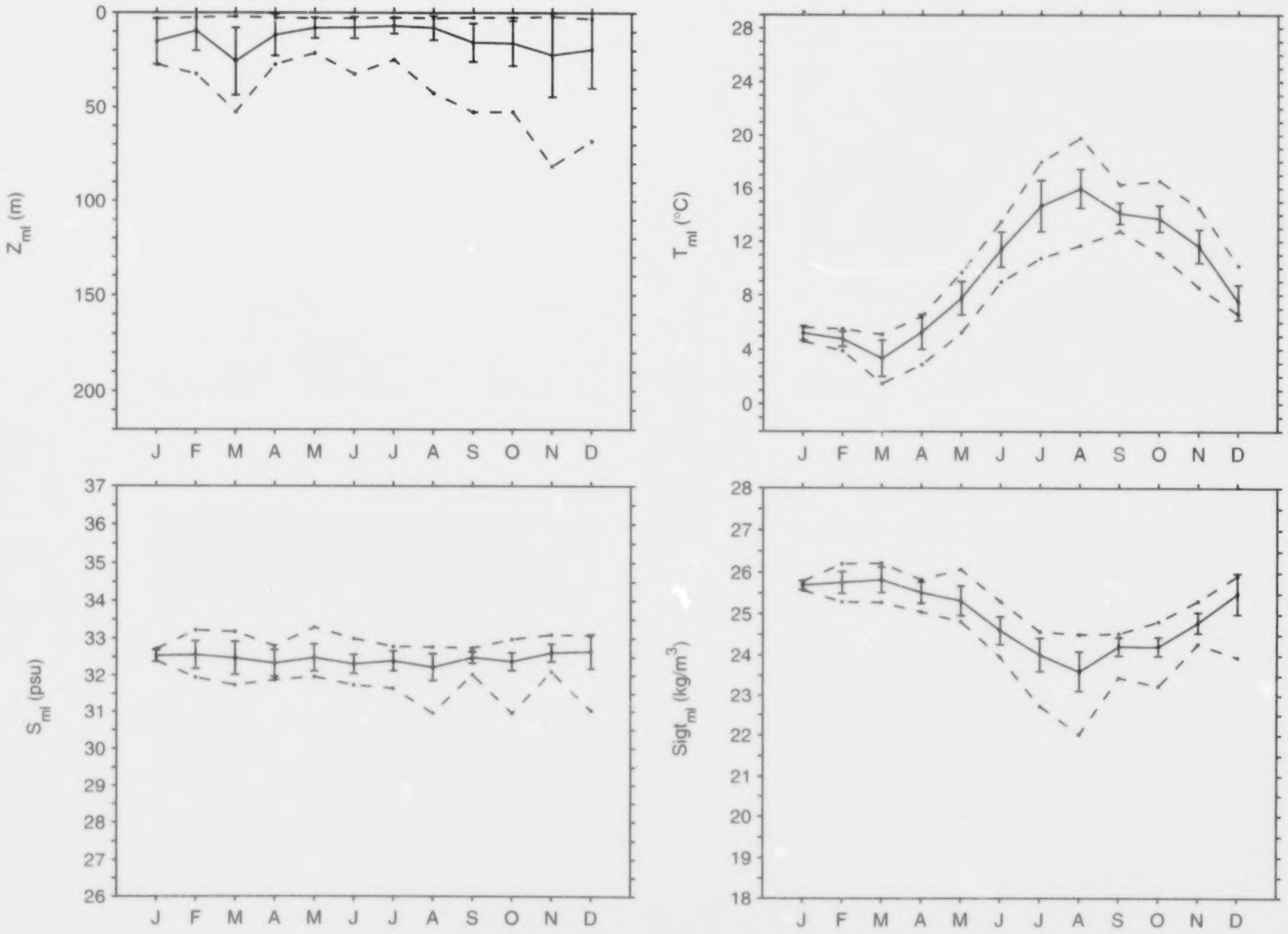

Figure 30c. Monthly statistics of mixed layer characteristics for SS27 (– : mean±sd; –– : min,max).

Table 28. Monthly statistics of mixed layer characteristics for SS27.

Profiles extracted (#) : 1552 Profiles retained (#) : 513 Profiles rejected (%) : 66.9
Mean seabed depth (m) for subregion : 48.5 Mean sounding depth (m) for profiles : 60.8

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	3	9	7	9	12	42	78	122	68	101	46	16
Mixed layer depth : Z_ml (m)												
mean	15.25	9.52	25.75	11.82	8.00	7.85	6.98	8.04	15.75	16.18	22.39	19.55
median	15.00	3.50	18.50	3.50	7.50	7.45	7.30	7.50	13.12	12.55	15.00	7.75
min	3.25	2.50	2.00	2.75	3.00	3.00	2.50	3.00	2.50	2.60	2.00	3.25
max	27.50	32.50	52.50	27.50	21.50	32.50	25.00	42.50	52.50	52.45	81.50	68.10
s.d.	NaN	10.66	17.89	10.99	5.48	5.67	4.11	6.43	10.14	11.86	22.05	20.31
Mixed layer temperature : T_ml (deg.C)												
mean	5.23	4.81	3.36	5.32	7.78	11.41	14.69	16.00	14.14	13.72	11.64	7.47
median	5.40	4.75	3.09	5.85	8.22	11.40	14.46	15.80	14.02	13.37	11.62	6.78
min	4.64	3.92	1.50	2.90	5.27	8.97	10.74	11.70	12.78	11.07	8.55	6.59
max	5.65	5.53	5.13	6.46	9.68	13.53	17.99	19.79	16.28	16.55	14.54	10.18
s.d.	NaN	0.56	1.35	1.27	1.22	1.32	1.93	1.45	0.80	0.99	1.25	1.27
Mixed layer salinity : S_ml (psu)												
mean	32.53	32.56	32.47	32.34	32.49	32.32	32.40	32.23	32.50	32.38	32.62	32.65
median	32.49	32.56	32.47	32.47	32.45	32.26	32.46	32.25	32.55	32.41	32.64	32.77
min	32.40	31.95	31.74	31.88	31.97	31.74	31.65	30.95	32.03	30.95	32.11	31.02
max	32.71	33.22	33.18	32.80	33.30	33.00	32.79	32.78	32.75	32.98	33.10	33.08
s.d.	NaN	0.37	0.45	0.36	0.36	0.26	0.27	0.37	0.15	0.24	0.24	0.46
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.69	25.76	25.83	25.52	25.33	24.61	24.02	23.61	24.22	24.22	24.80	25.50
median	25.73	25.74	25.79	25.57	25.30	24.55	24.10	23.65	24.28	24.30	24.77	25.69
min	25.57	25.29	25.28	25.05	24.82	23.96	22.73	22.02	23.45	23.24	24.28	23.95
max	25.78	26.20	26.22	25.83	26.08	25.31	24.58	24.51	24.53	24.82	25.32	25.93
s.d.	NaN	0.26	0.31	0.26	0.36	0.34	0.41	0.49	0.22	0.23	0.25	0.50

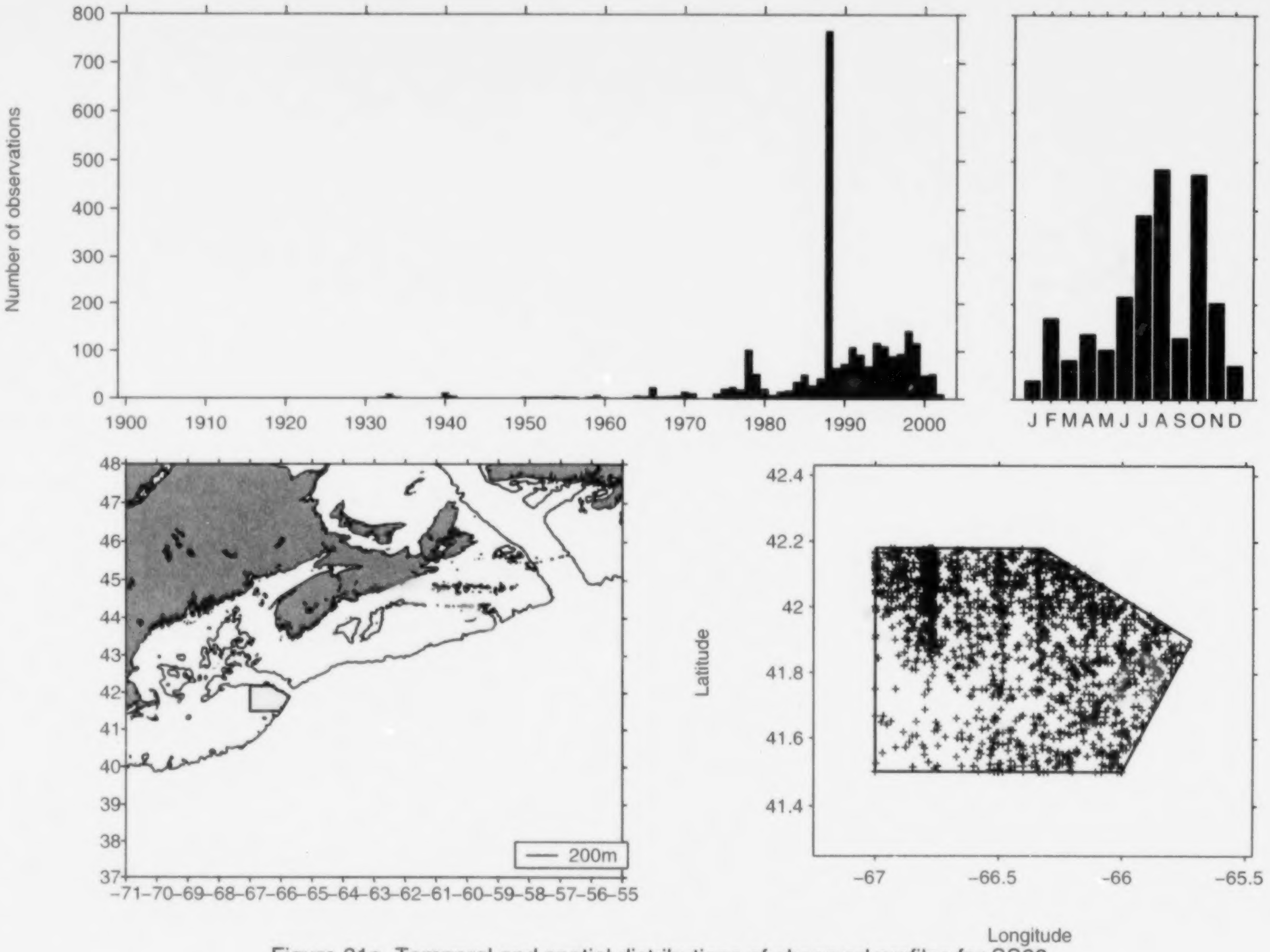

Figure 31a. Temporal and spatial distributions of observed profiles for SS28.

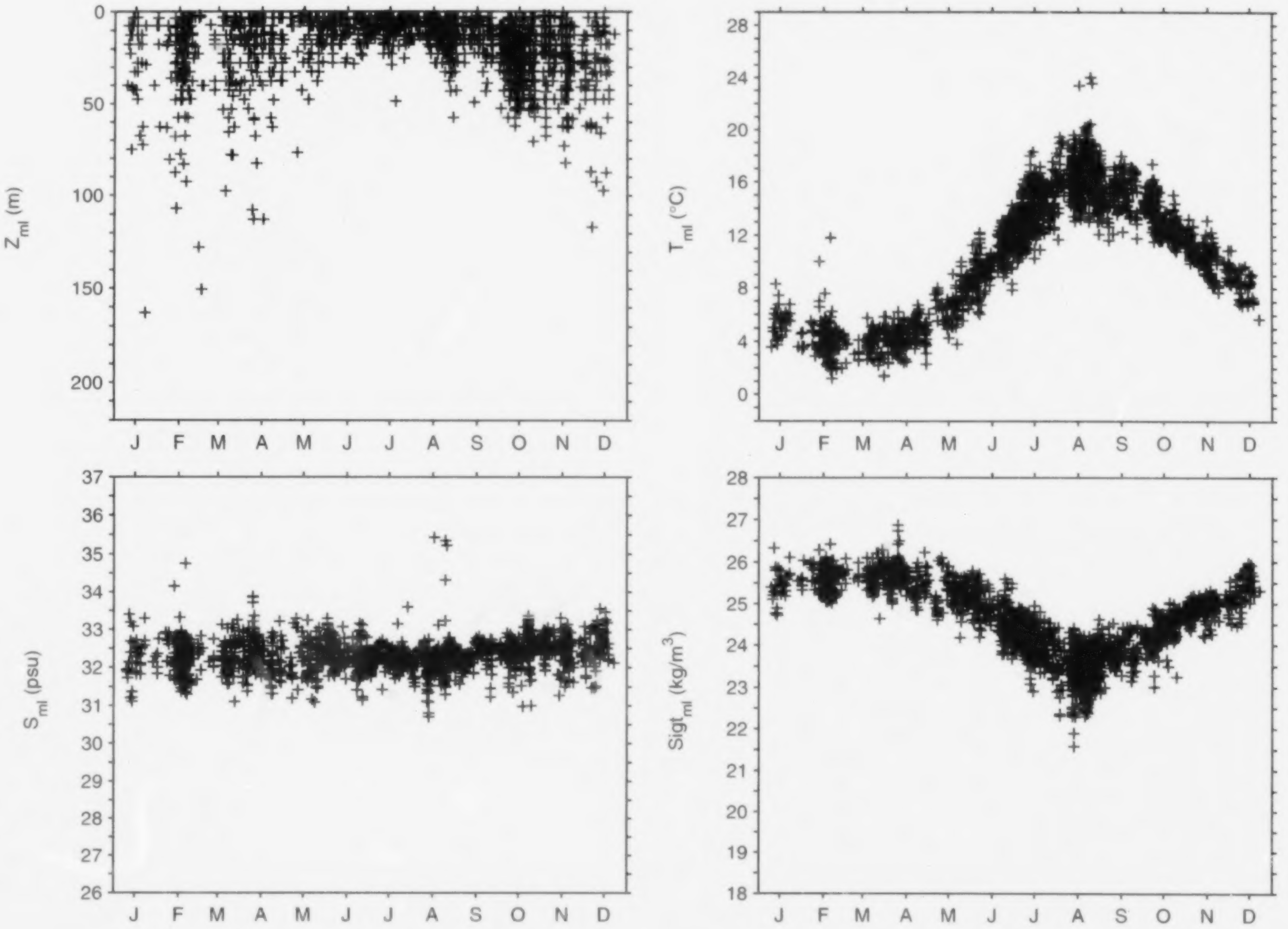

Figure 31b. Calculated mixed layer characteristics for SS28.

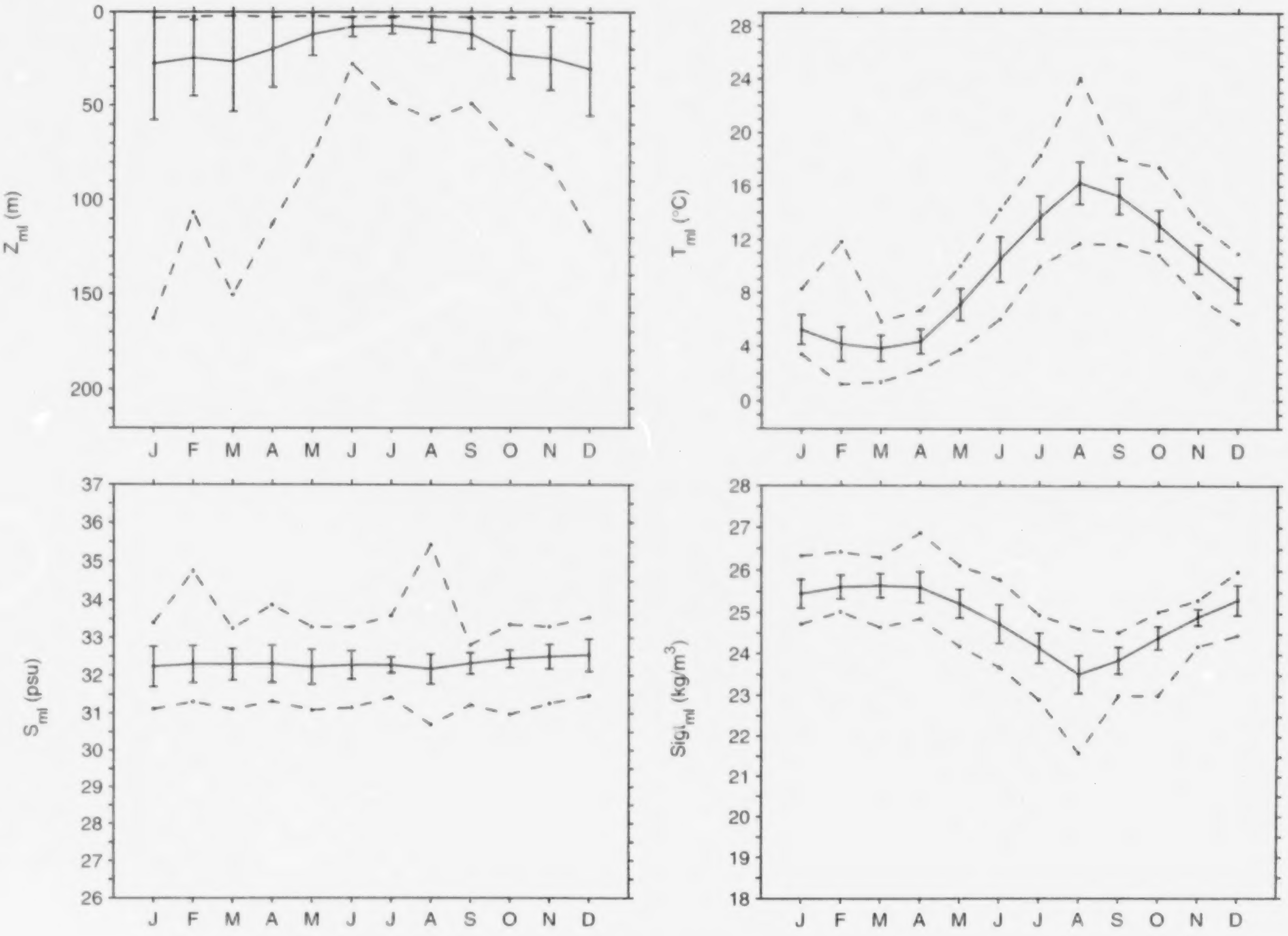

Figure 31c. Monthly statistics of mixed layer characteristics for SS28 (– : mean±sd; –– : min,max).

Table 29. Monthly statistics of mixed layer characteristics for SS28.

Profiles extracted (#) : 4102   Profiles retained (#) : 2498   Profiles rejected (%) : 39.1
Mean seabed depth (m) for subregion : 89.7   Mean sounding depth (m) for profiles : 102.6

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	39	167	85	136	105	203	402	473	133	481	195	79
Mixed layer depth : Z_ml (m)												
mean	27.78	24.63	26.62	19.78	11.90	7.86	7.36	9.28	11.66	22.80	24.80	30.62
median	17.50	18.50	22.50	12.53	7.50	7.50	7.50	7.50	7.90	22.00	22.50	27.50
min	3.25	2.50	2.00	2.70	2.00	2.95	2.25	2.50	2.65	2.90	2.00	3.25
max	163.00	106.90	150.50	112.50	76.50	28.00	48.50	57.30	49.00	70.45	82.25	116.50
s.d.	29.98	20.43	26.67	20.50	11.53	5.34	4.28	7.09	8.15	12.93	17.02	24.80
Mixed layer temperature : T_ml (deg.C)												
mean	5.24	4.18	3.86	4.37	7.12	10.51	13.65	16.24	15.24	13.05	10.54	8.19
median	5.33	4.24	3.99	4.32	7.14	10.54	13.38	16.12	15.40	12.67	10.70	8.36
min	3.41	1.20	1.36	2.28	3.79	6.03	9.99	11.70	11.66	10.83	7.68	5.71
max	8.29	11.83	5.85	6.69	10.01	14.24	18.31	24.03	18.02	17.40	13.25	10.94
s.d.	1.09	1.28	0.97	0.92	1.19	1.69	1.60	1.59	1.33	1.13	1.09	0.98
Mixed layer salinity : S_ml (psu)												
mean	32.23	32.30	32.30	32.31	32.24	32.28	32.28	32.18	32.33	32.45	32.51	32.55
median	32.28	32.35	32.25	32.25	32.24	32.27	32.32	32.17	32.32	32.47	32.54	32.52
min	31.11	31.31	31.11	31.32	31.10	31.16	31.43	30.70	31.23	30.98	31.27	31.47
max	33.40	34.76	33.25	33.88	33.30	33.30	33.60	35.43	32.82	33.36	33.31	33.55
s.d.	0.53	0.49	0.41	0.49	0.46	0.37	0.21	0.39	0.28	0.23	0.33	0.43
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.45	25.61	25.64	25.61	25.22	24.73	24.15	23.52	23.85	24.40	24.91	25.32
median	25.44	25.64	25.65	25.60	25.17	24.68	24.19	23.58	23.81	24.47	24.93	25.28
min	24.72	25.02	24.64	24.85	24.18	23.68	22.90	21.58	23.00	23.01	24.19	24.46
max	26.33	26.43	26.29	26.87	26.10	25.80	24.95	24.62	24.52	25.03	25.31	25.98
s.d.	0.34	0.28	0.28	0.36	0.34	0.47	0.37	0.45	0.32	0.28	0.20	0.35

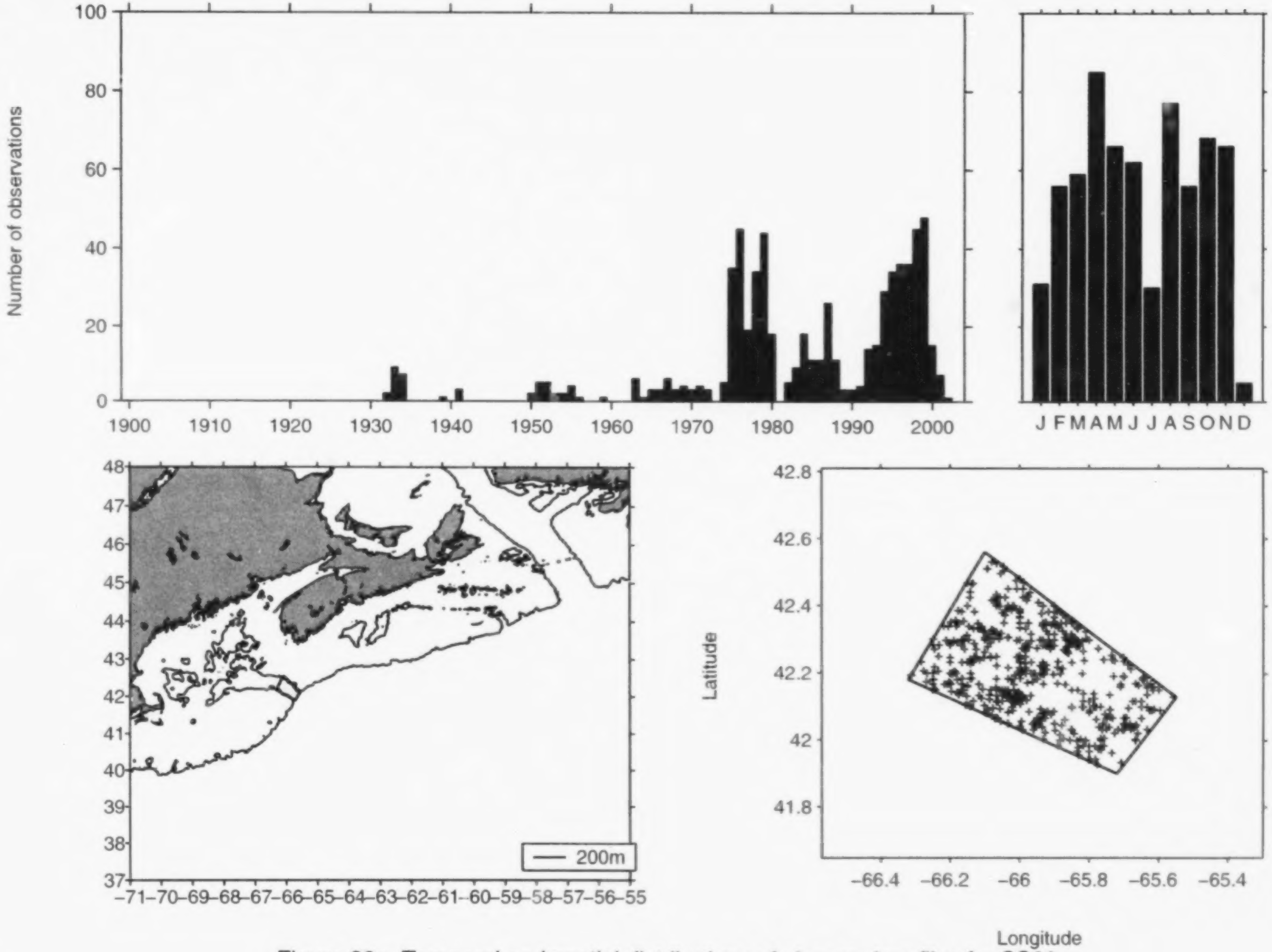

Figure 32a. Temporal and spatial distributions of observed profiles for SS29.

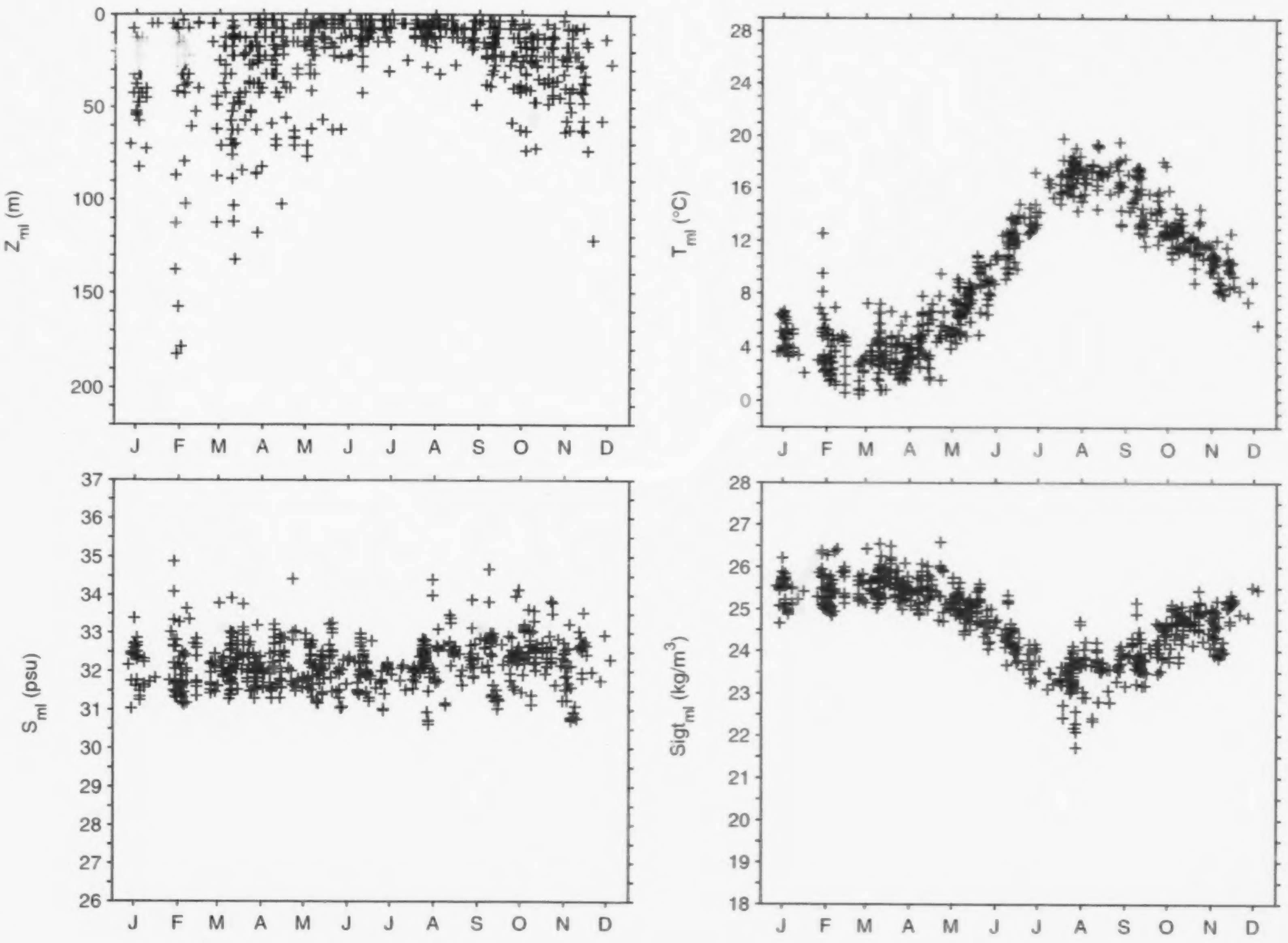

Figure 32b. Calculated mixed layer characteristics for SS29.

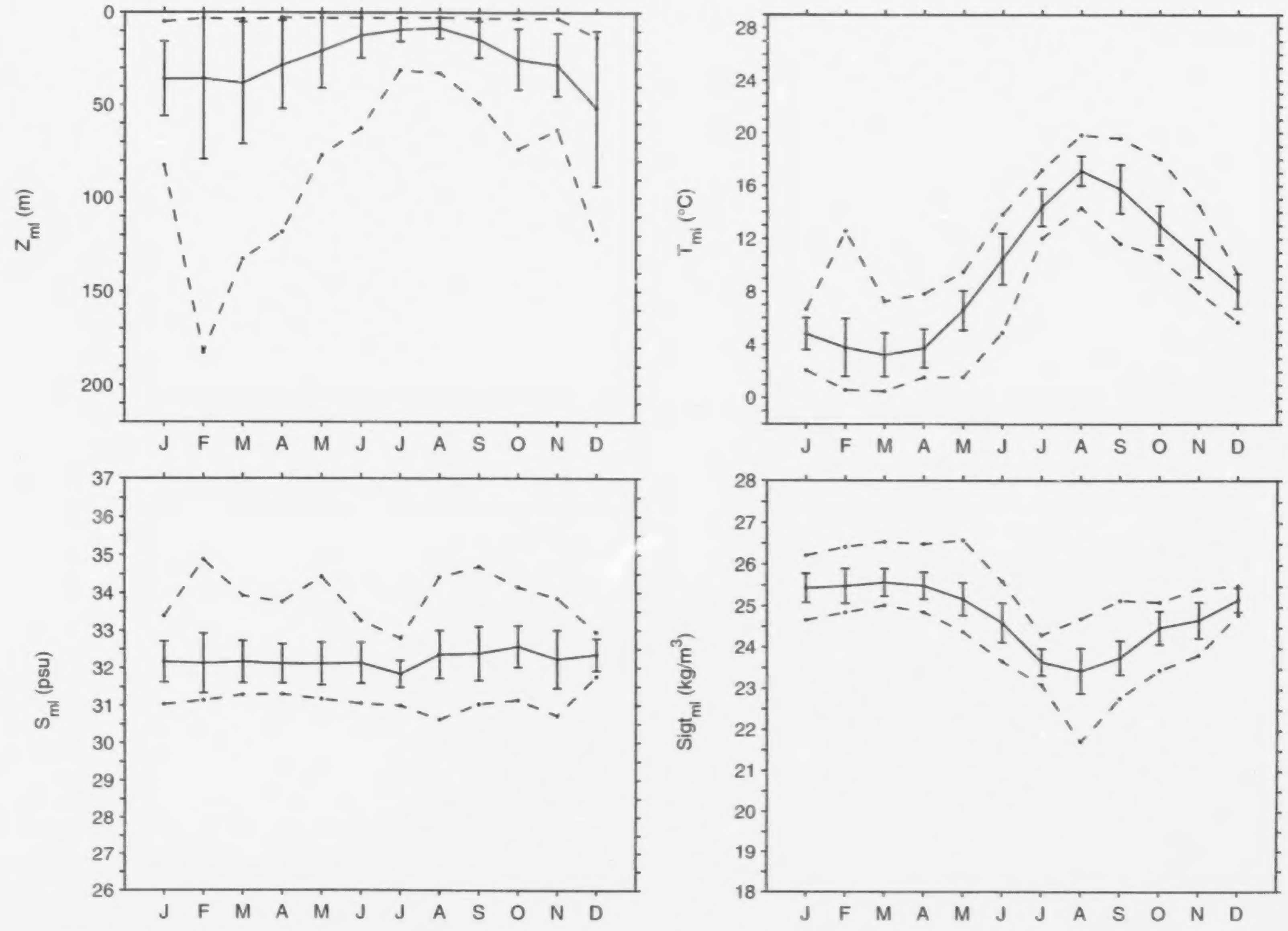

Figure 32c. Monthly statistics of mixed layer characteristics for SS29 (– : mean±sd; –– : min,max).

Table 30. Monthly statistics of mixed layer characteristics for SS29.

Profiles extracted (#) : 842 Profiles retained (#) : 661 Profiles rejected (%) : 21.5
Mean seabed depth (m) for subregion : 239.4 Mean sounding depth (m) for profiles : 231.9

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	31	56	58	84	68	62	30	77	56	68	65	6
Mixed layer depth : Z_ml (m)												
mean	35.87	35.62	38.06	28.16	20.47	12.31	9.21	8.39	14.47	25.19	28.13	51.75
median	37.60	17.65	26.25	22.45	13.20	7.88	7.50	7.45	12.62	22.20	25.00	42.25
min	5.00	3.25	3.65	2.80	3.05	3.00	3.00	2.75	3.15	3.25	3.25	13.25
max	82.50	182.50	132.50	118.00	77.00	62.50	31.00	32.40	49.00	73.65	63.50	122.00
s.d.	20.25	43.49	32.84	23.86	20.21	11.96	6.22	5.53	9.72	16.34	17.01	41.84
Mixed layer temperature : T_ml (deg.C)												
mean	4.82	3.79	3.24	3.74	6.58	10.49	14.37	17.15	15.76	13.01	10.55	8.05
median	4.88	3.25	3.09	3.55	6.69	10.61	14.07	17.26	16.04	12.75	10.66	8.44
min	2.10	0.60	0.50	1.57	1.58	4.91	12.03	14.31	11.65	10.70	7.97	5.70
max	6.67	12.55	7.26	7.83	9.50	13.81	17.21	19.84	19.58	18.08	14.49	9.36
s.d.	1.19	2.15	1.63	1.43	1.50	1.93	1.42	1.12	1.85	1.46	1.43	1.32
Mixed layer salinity : S_ml (psu)												
mean	32.16	32.13	32.16	32.11	32.11	32.13	31.83	32.35	32.38	32.56	32.22	32.35
median	32.32	31.94	32.10	32.04	32.03	32.21	31.79	32.48	32.46	32.52	32.34	32.37
min	31.03	31.14	31.28	31.30	31.17	31.05	30.99	30.62	31.03	31.14	30.72	31.76
max	33.39	34.88	33.92	33.77	34.42	33.26	32.79	34.41	34.68	34.15	33.85	32.94
s.d.	0.55	0.79	0.56	0.52	0.57	0.55	0.36	0.64	0.72	0.55	0.77	0.43
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.44	25.49	25.58	25.50	25.18	24.61	23.66	23.44	23.77	24.49	24.68	25.18
median	25.52	25.42	25.62	25.48	25.13	24.55	23.59	23.56	23.73	24.61	24.81	25.20
min	24.66	24.85	25.02	24.86	24.39	23.67	23.10	21.72	22.78	23.46	23.83	24.81
max	26.22	26.42	26.55	26.49	26.59	25.61	24.31	24.70	25.15	25.11	25.44	25.52
s.d.	0.35	0.42	0.33	0.32	0.40	0.48	0.32	0.55	0.41	0.40	0.44	0.29

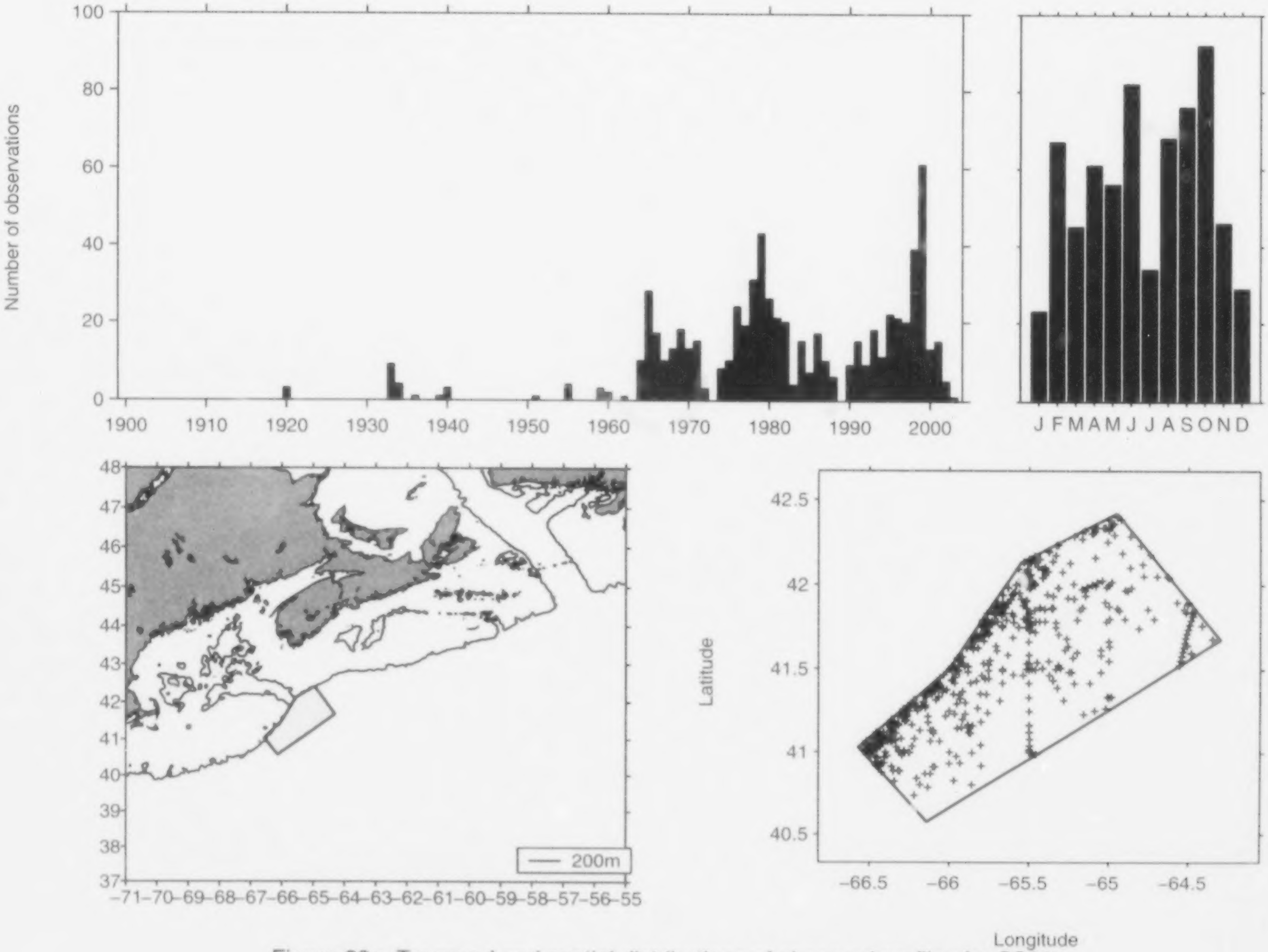

Figure 33a. Temporal and spatial distributions of observed profiles for SS30.

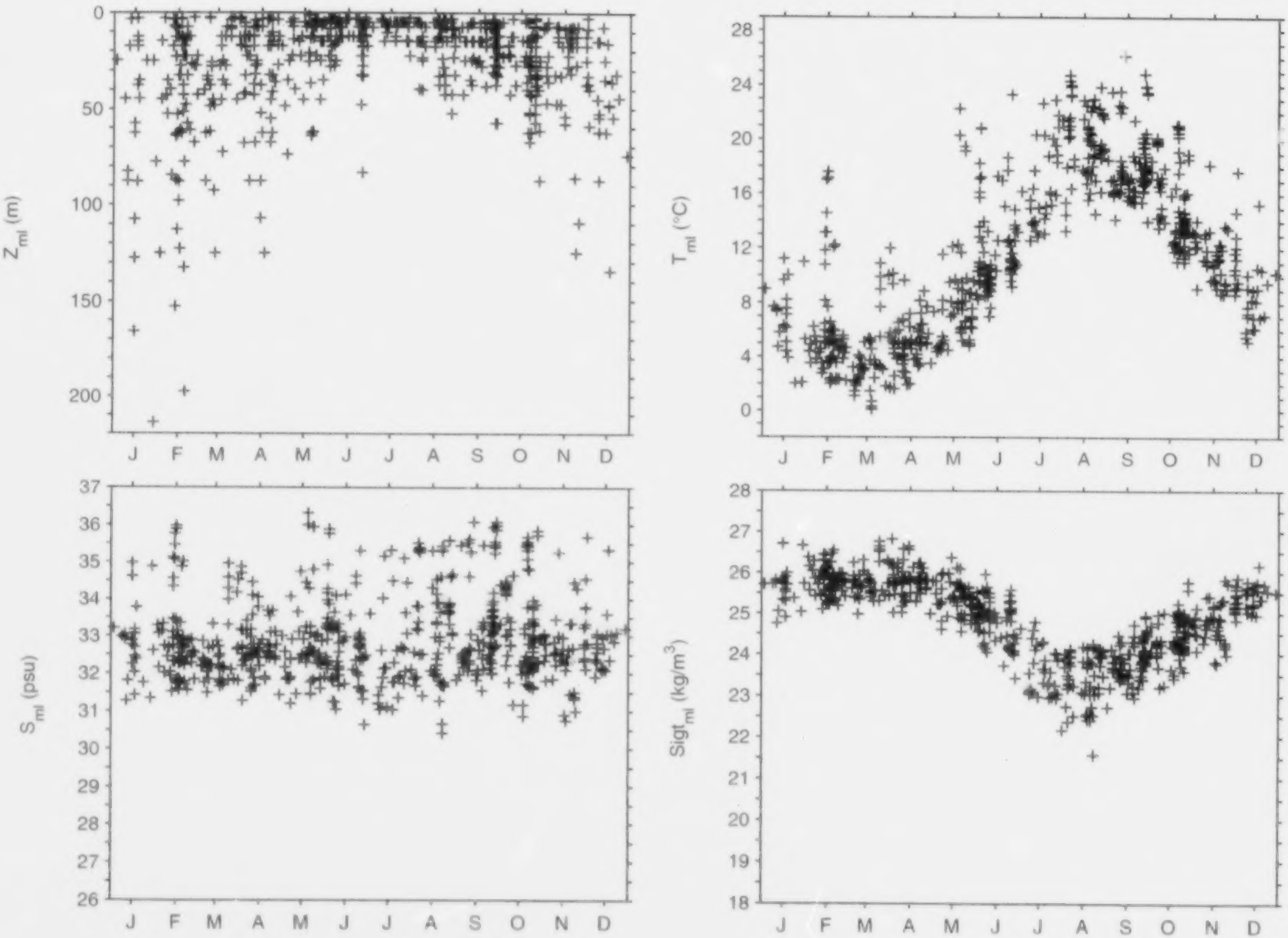

Figure 33b. Calculated mixed layer characteristics for SS30.

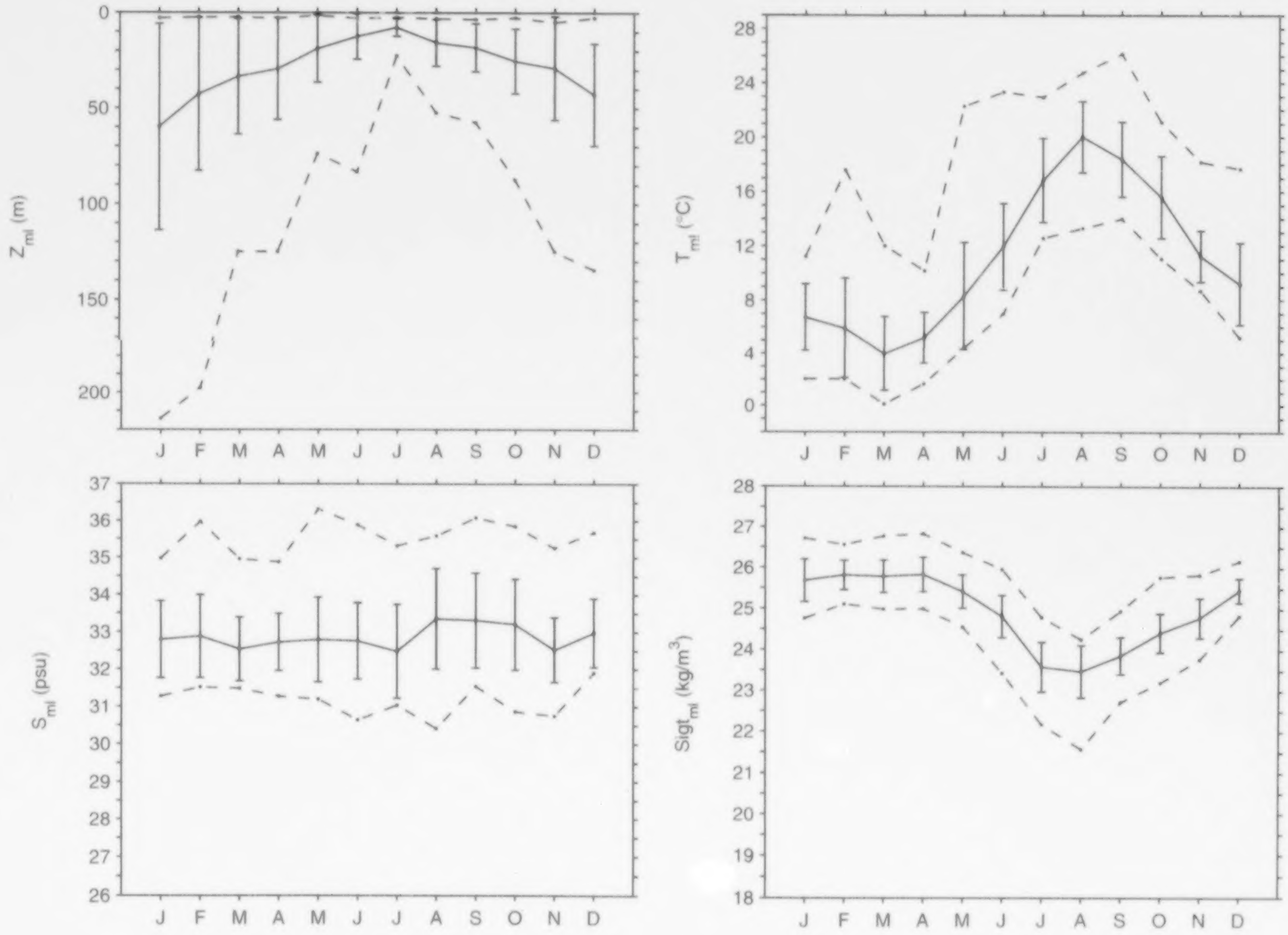

Figure 33c. Monthly statistics of mixed layer characteristics for SS30 (– : mean±sd; -- : min,max).

Table 31. Monthly statistics of mixed layer characteristics for SS30.

Profiles extracted (#) : 853   Profiles retained (#) : 679   Profiles rejected (%) : 20.4
Mean seabed depth (m) for subregion : 2182.3   Mean sounding depth (m) for profiles : 1275.1

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	23	67	45	61	56	82	34	68	76	92	45	30
Mixed layer depth : Z_ml (m)												
mean	59.79	42.60	33.43	29.35	18.83	12.41	7.67	15.63	18.22	25.30	29.05	42.86
median	44.45	27.50	27.50	17.50	12.62	8.18	5.00	14.18	15.00	22.30	17.50	38.50
min	3.00	2.50	2.45	3.00	1.50	3.00	2.50	3.10	3.50	2.75	5.00	2.75
max	214.00	197.50	125.00	125.00	73.75	83.25	22.50	52.45	57.50	87.50	125.00	134.50
s.d.	53.82	40.01	30.23	26.67	17.59	11.93	4.62	12.15	12.46	16.95	27.07	26.72
Mixed layer temperature : T_ml (deg.C)												
mean	6.72	5.88	3.97	5.19	8.30	11.96	16.84	20.03	18.38	15.60	11.26	9.20
median	6.30	4.88	3.30	4.96	7.42	10.81	15.98	20.22	17.41	14.36	11.23	9.04
min	2.03	2.03	0.10	1.64	4.39	7.00	12.57	13.29	14.00	11.06	8.71	5.20
max	11.22	17.61	12.00	10.17	22.29	23.35	22.96	24.77	26.16	21.10	18.19	17.69
s.d.	2.48	3.75	2.81	1.91	3.97	3.18	3.09	2.63	2.75	3.03	1.88	3.02
Mixed layer salinity : S_ml (psu)												
mean	32.80	32.89	32.54	32.73	32.80	32.77	32.49	33.36	33.32	33.21	32.53	32.98
median	32.76	32.67	32.22	32.59	32.49	32.69	32.09	33.33	32.79	32.98	32.51	32.83
min	31.27	31.52	31.49	31.28	31.20	30.64	31.04	30.42	31.55	30.87	30.75	31.91
max	34.97	35.98	34.96	34.88	36.32	35.89	35.32	35.59	36.09	35.85	35.26	35.68
s.d.	1.03	1.11	0.86	0.76	1.13	1.02	1.26	1.35	1.28	1.22	0.86	0.92
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.68	25.81	25.78	25.83	25.42	24.81	23.58	23.47	23.86	24.42	24.79	25.46
median	25.72	25.84	25.74	25.82	25.42	24.92	23.55	23.70	23.83	24.32	24.84	25.51
min	24.75	25.10	24.98	24.99	24.55	23.43	22.17	21.57	22.72	23.20	23.77	24.83
max	26.71	26.55	26.77	26.83	26.37	25.96	24.79	24.25	24.94	25.77	25.83	26.17
s.d.	0.52	0.36	0.39	0.42	0.41	0.51	0.61	0.64	0.45	0.47	0.48	0.30

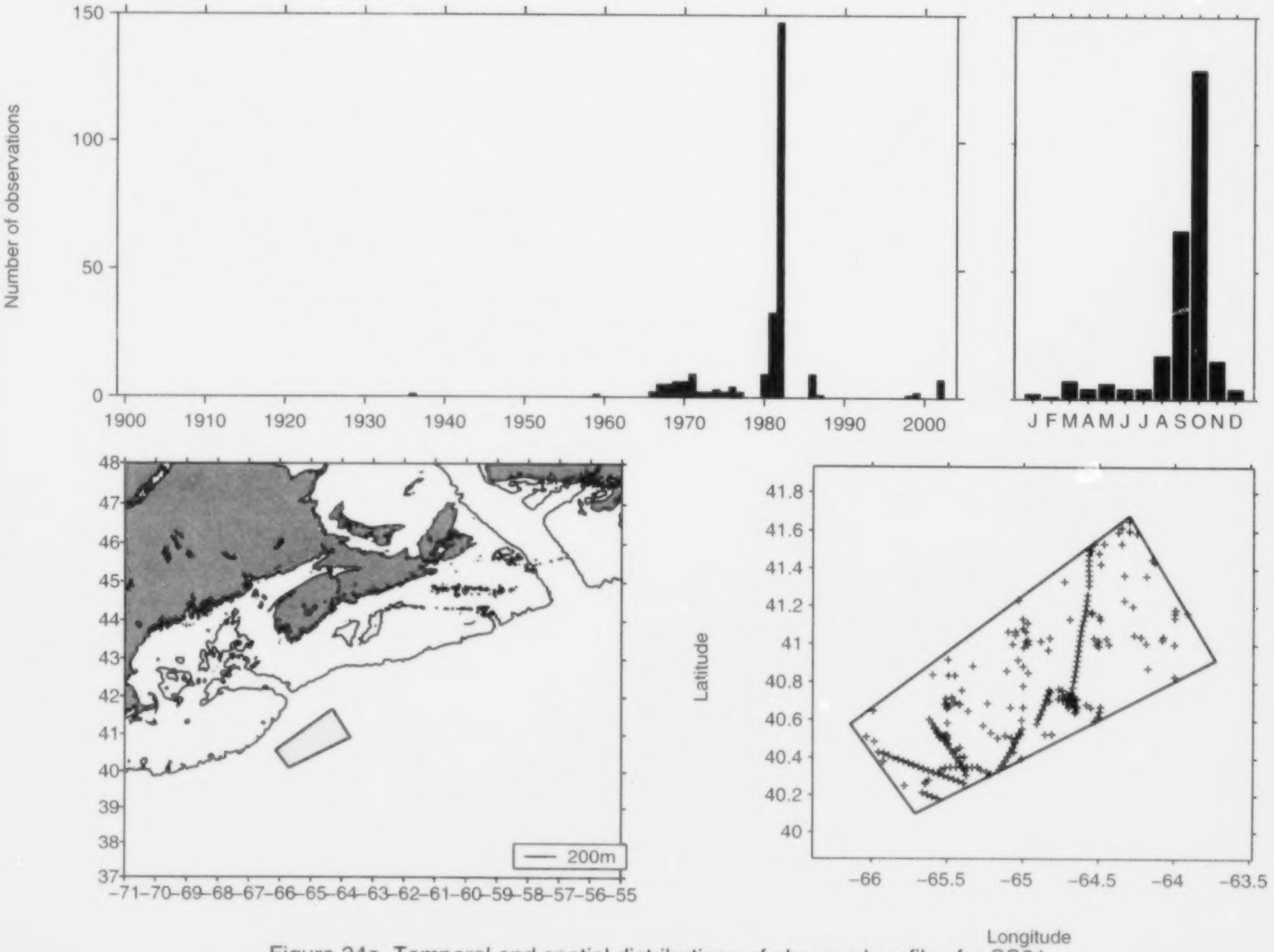

Figure 34a. Temporal and spatial distributions of observed profiles for SS31.

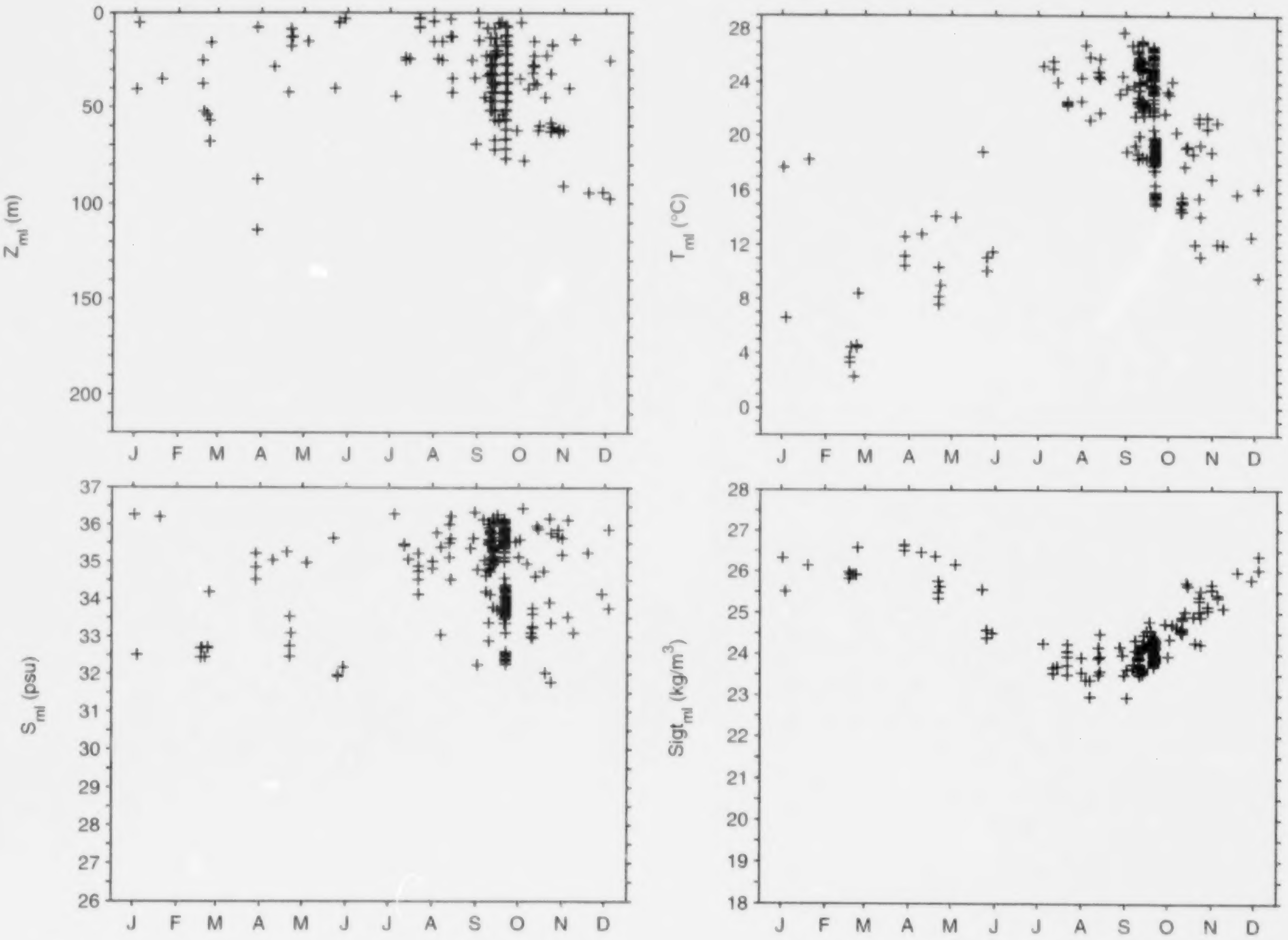

Figure 34b. Calculated mixed layer characteristics for SS31.

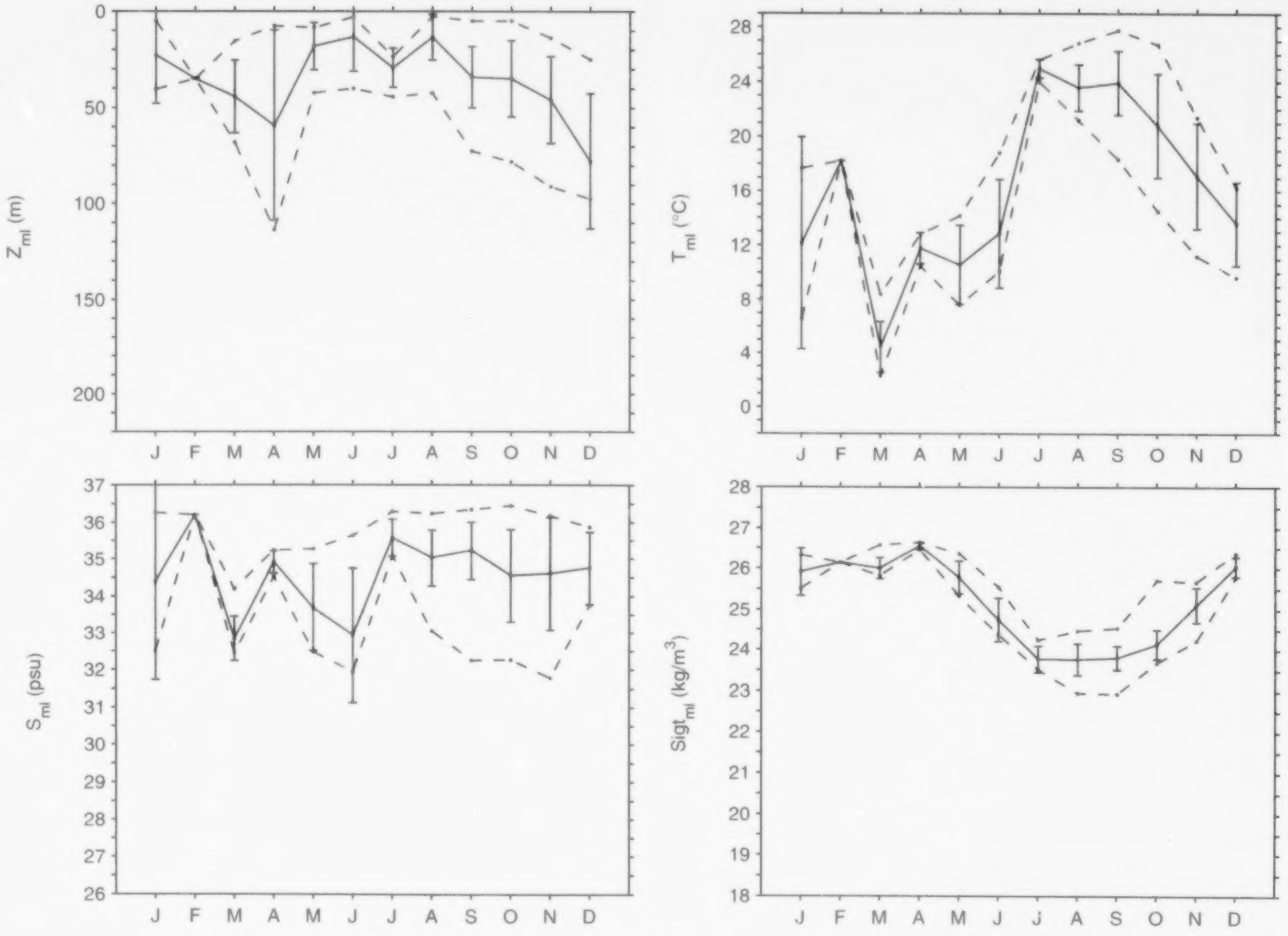

Figure 34c. Monthly statistics of mixed layer characteristics for SS31 (– : mean±sd; –– : min,max).

Table 32. Monthly statistics of mixed layer characteristics for SS31.

Profiles extracted (#) : 303   Profiles retained (#) : 259   Profiles rejected (%) : 14.5
Mean seabed depth (m) for subregion : 3785.2   Mean sounding depth (m) for profiles : 3749.3

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	2	1	7	4	6	4	4	17	66	129	15	4
Mixed layer depth : Z_ml (m)												
mean	22.73	35.00	44.24	59.29	18.07	13.26	29.29	13.43	34.10	34.88	45.93	77.79
median	22.73	35.00	52.45	57.90	13.90	5.00	24.65	12.25	32.38	31.75	45.00	94.33
min	5.00	35.00	15.50	7.65	8.45	3.05	23.50	2.75	5.00	5.00	13.90	25.00
max	40.45	35.00	68.00	113.70	42.25	40.00	44.35	42.35	72.50	78.00	91.00	97.50
s.d.	NaN	NaN	18.87	NaN	12.22	NaN	NaN	11.82	15.80	19.68	22.46	NaN
Mixed layer temperature : T_ml (deg.C)												
mean	12.13	18.23	4.45	11.77	10.56	12.88	24.97	23.59	23.93	20.79	17.09	13.59
median	12.13	18.23	4.42	11.91	9.69	11.29	25.12	22.60	24.84	19.87	18.70	14.24
min	6.59	18.23	2.29	10.46	7.60	10.10	24.02	21.18	18.34	14.51	11.20	9.65
max	17.67	18.23	8.40	12.82	14.14	18.82	25.61	26.82	27.76	26.71	21.38	16.22
s.d.	NaN	NaN	1.92	NaN	2.89	NaN	NaN	1.68	2.33	3.79	3.88	NaN
Mixed layer salinity : S_ml (psu)												
mean	34.39	36.21	32.84	34.91	33.68	32.93	35.57	35.03	35.22	34.55	34.61	34.76
median	34.39	36.21	32.69	34.95	33.32	32.08	35.46	35.02	35.35	34.61	35.19	34.69
min	32.51	36.21	32.45	34.52	32.47	31.94	35.07	33.05	32.25	32.26	31.78	33.76
max	36.27	36.21	34.19	35.23	35.26	35.64	36.29	36.24	36.34	36.45	36.18	35.88
s.d.	NaN	NaN	0.61	NaN	1.17	NaN	NaN	0.76	0.78	1.25	1.53	NaN
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.92	26.14	26.00	26.56	25.79	24.75	23.78	23.77	23.81	24.15	25.12	26.05
median	25.92	26.14	25.92	26.56	25.69	24.54	23.68	23.89	23.71	24.19	25.15	26.01
min	25.51	26.14	25.82	26.46	25.34	24.38	23.52	22.96	22.95	23.69	24.24	25.79
max	26.32	26.14	26.58	26.64	26.36	25.56	24.25	24.48	24.55	25.72	25.68	26.37
s.d.	NaN	NaN	0.26	NaN	0.40	NaN	NaN	0.38	0.29	0.36	0.43	NaN

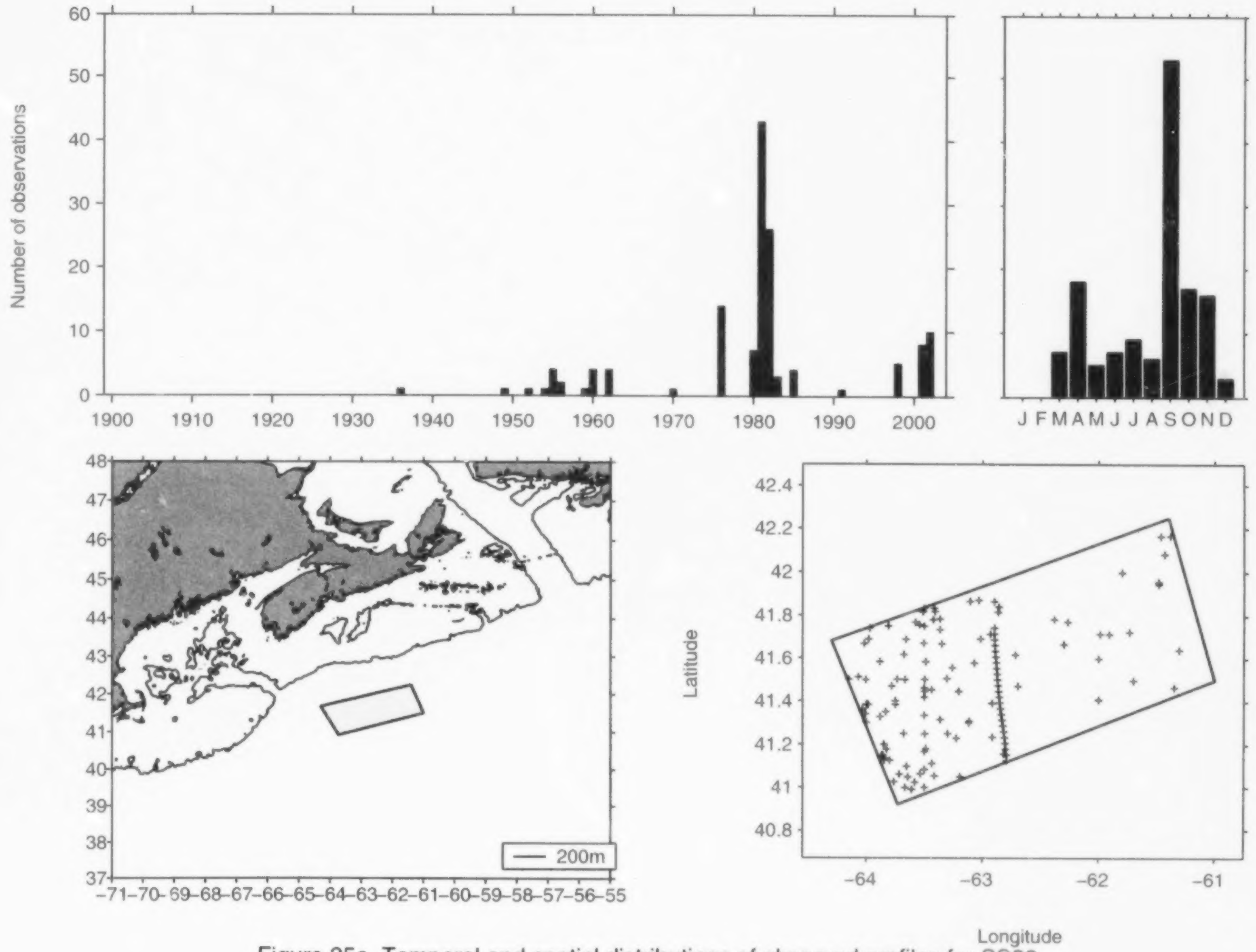

Figure 35a. Temporal and spatial distributions of observed profiles for SS32.

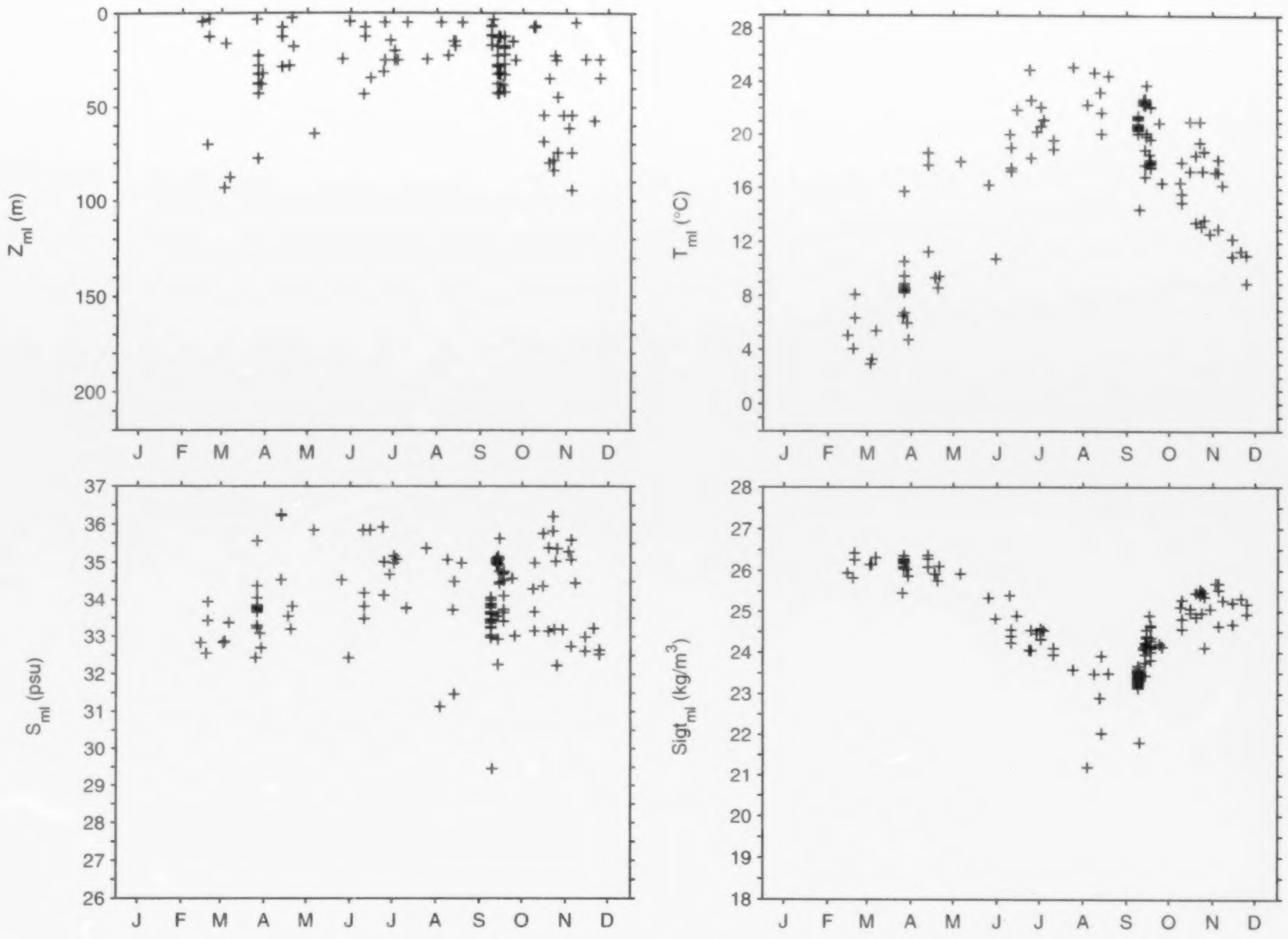

Figure 35b. Calculated mixed layer characteristics for SS32.

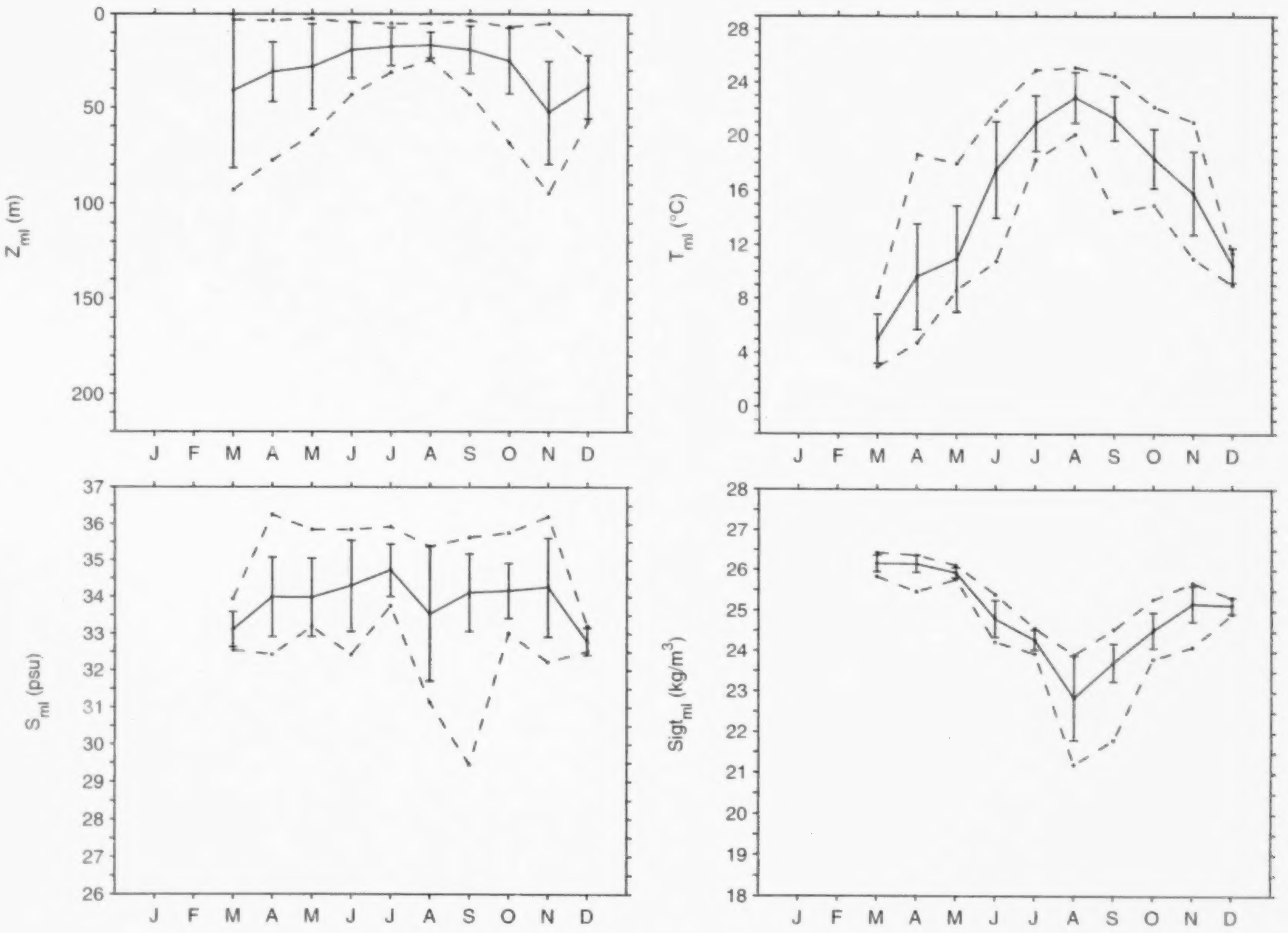

Figure 35c. Monthly statistics of mixed layer characteristics for SS32 (– : mean±sd; –– : min,max).

Table 33. Monthly statistics of mixed layer characteristics for SS32.

Profiles extracted (#) : 202 Profiles retained (#) : 141 Profiles rejected (%) : 30.2
Mean seabed depth (m) for subregion : 3822.6 Mean sounding depth (m) for profiles : 3698.3

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	0	0	7	18	5	7	9	6	53	17	16	3
Mixed layer depth : Z_ml (m)												
mean	NaN	NaN	40.96	30.94	28.09	19.14	17.29	16.57	19.04	24.96	52.38	38.83
median	NaN	NaN	16.00	32.10	27.90	12.50	20.00	16.23	12.65	21.85	54.53	34.45
min	NaN	NaN	3.20	3.50	2.50	4.50	5.00	5.00	3.50	6.80	5.00	24.55
max	NaN	NaN	93.00	77.50	64.35	43.15	31.15	24.50	43.00	68.75	94.55	57.50
s.d.	NaN	NaN	40.66	15.97	22.78	15.10	10.24	6.89	12.71	17.59	27.24	NaN
Mixed layer temperature : T_ml (deg.C)												
mean	NaN	NaN	5.03	9.63	10.95	17.52	20.94	22.87	21.31	18.35	15.82	10.48
median	NaN	NaN	5.06	8.48	9.36	17.49	20.66	22.77	21.31	17.89	16.72	11.07
min	NaN	NaN	2.95	4.74	8.60	10.77	18.26	20.10	14.44	14.95	10.98	9.00
max	NaN	NaN	8.10	18.61	17.96	21.90	24.94	25.14	24.48	22.16	21.03	11.37
s.d.	NaN	NaN	1.81	3.91	3.94	3.54	2.06	1.90	1.65	2.15	3.04	NaN
Mixed layer salinity : S_ml (psu)												
mean	NaN	NaN	33.12	34.00	33.99	34.31	34.73	33.54	34.12	34.17	34.27	32.79
median	NaN	NaN	32.87	33.75	33.55	34.18	34.98	34.10	33.99	34.30	34.74	32.64
min	NaN	NaN	32.55	32.43	33.19	32.43	33.76	31.13	29.45	33.02	32.23	32.52
max	NaN	NaN	33.94	36.26	35.85	35.85	35.93	35.38	35.63	35.76	36.21	33.22
s.d.	NaN	NaN	0.48	1.07	1.06	1.24	0.72	1.83	1.05	0.74	1.35	NaN
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	NaN	NaN	26.16	26.15	25.93	24.80	24.29	22.85	23.73	24.53	25.18	25.14
median	NaN	NaN	26.16	26.21	25.92	24.82	24.31	23.19	23.67	24.56	25.31	25.18
min	NaN	NaN	25.83	25.46	25.76	24.23	23.94	21.20	21.81	23.81	24.11	24.93
max	NaN	NaN	26.43	26.37	26.11	25.40	24.58	23.91	24.55	25.28	25.69	25.32
s.d.	NaN	NaN	0.21	0.21	0.13	0.45	0.25	1.04	0.47	0.44	0.44	NaN

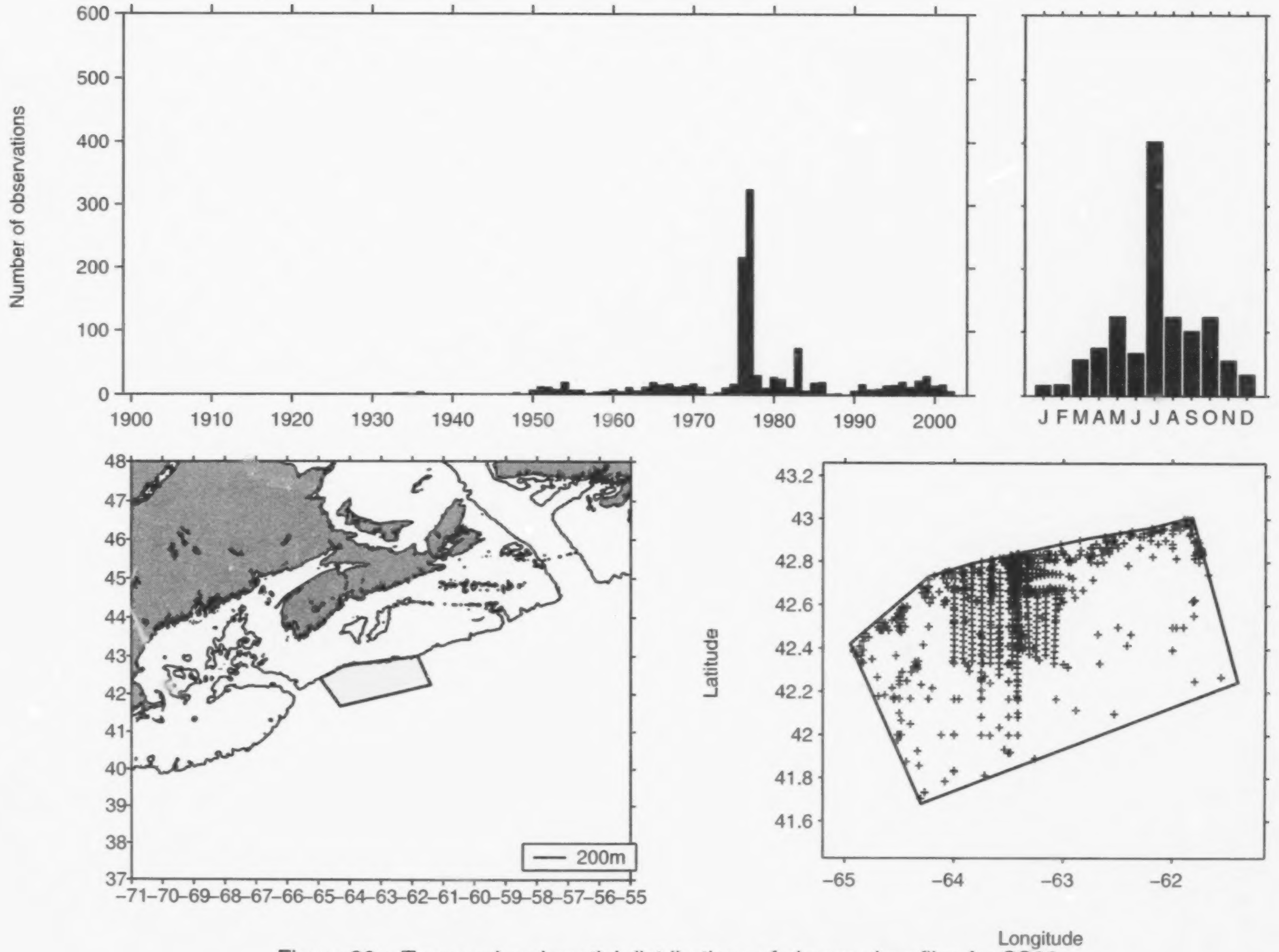

Figure 36a. Temporal and spatial distributions of observed profiles for SS33.

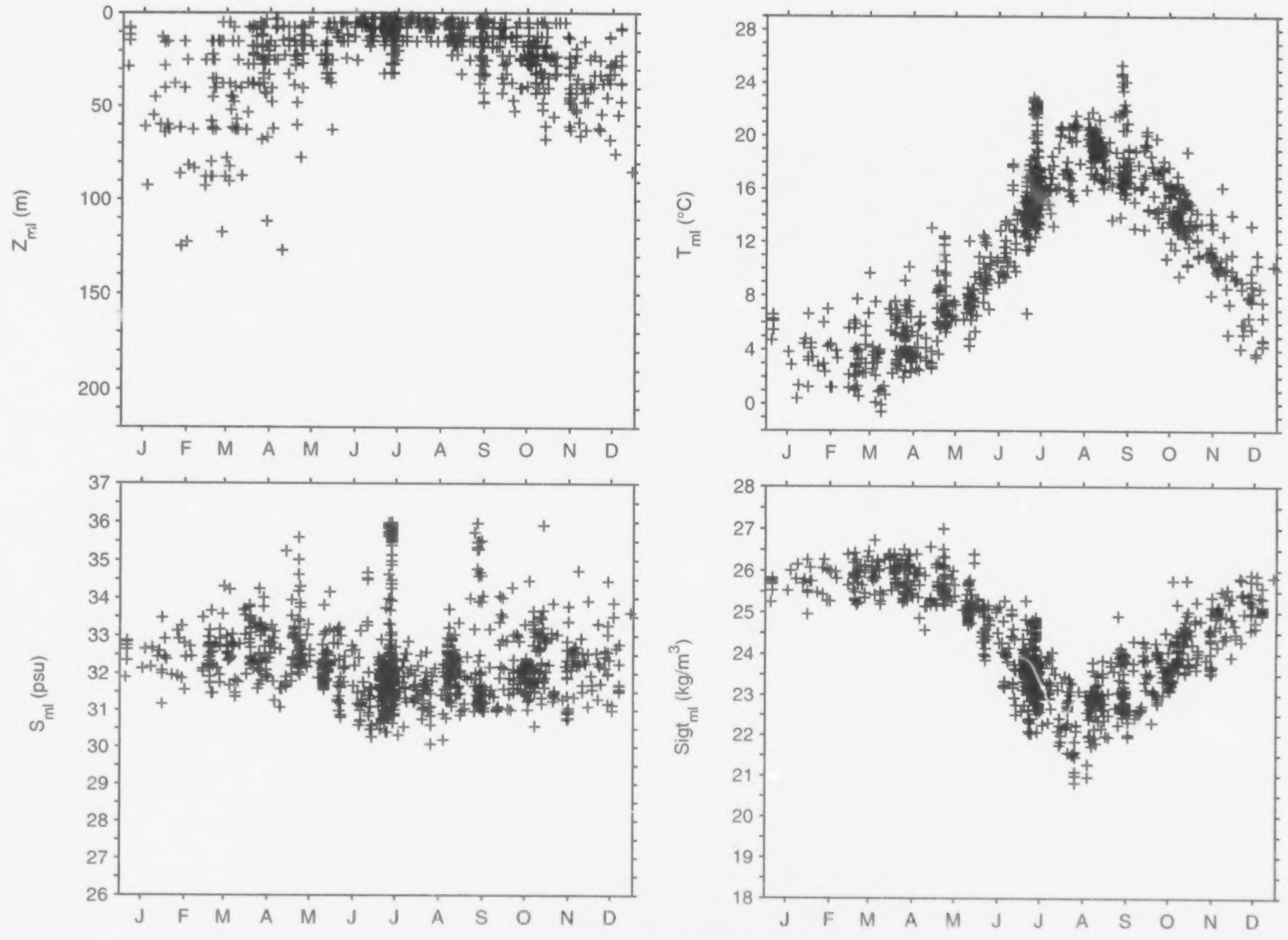

Figure 36b. Calculated mixed layer characteristics for SS33.

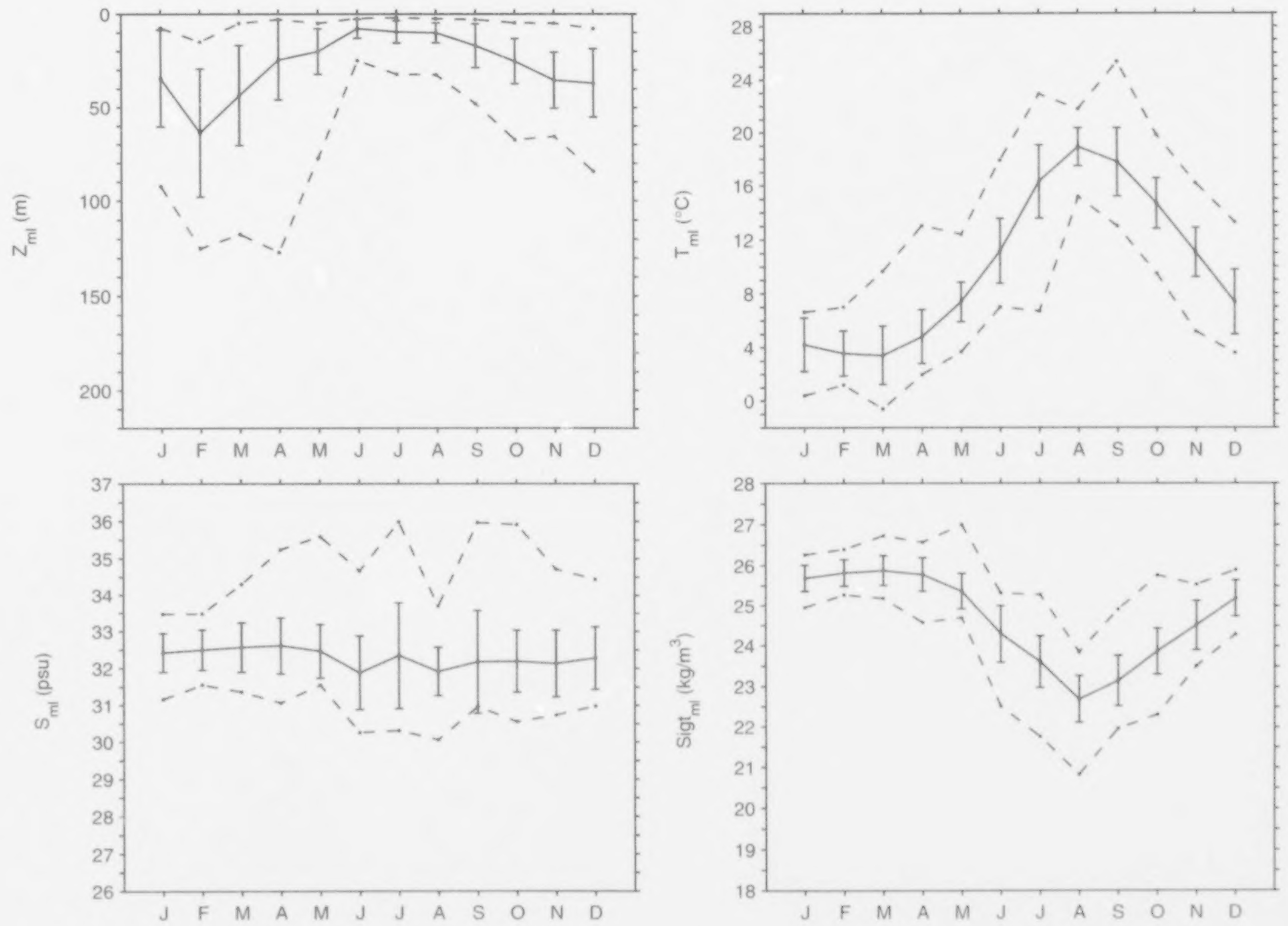

Figure 36c. Monthly statistics of mixed layer characteristics for SS33 (– : mean±sd; -- : min,max).

Table 34. Monthly statistics of mixed layer characteristics for SS33.

Profiles extracted (#) : 1733   Profiles retained (#) : 1190   Profiles rejected (%) : 31.3
Mean seabed depth (m) for subregion : 1916.2   Mean sounding depth (m) for profiles : 1124.8

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	16	17	56	74	124	66	402	123	101	123	55	33
Mixed layer depth : Z_ml (m)												
mean	34.45	63.66	43.65	24.52	20.07	7.84	9.56	10.11	16.97	25.29	35.39	36.92
median	28.20	62.50	40.00	17.85	19.60	5.00	7.50	8.05	13.25	23.50	37.50	33.00
min	7.50	15.00	5.00	3.00	5.00	2.35	2.00	2.50	3.05	4.80	5.00	7.85
max	92.50	125.00	117.50	127.00	77.15	25.00	32.25	32.50	48.00	67.50	65.65	84.45
s.d.	26.00	34.32	26.87	21.40	12.16	5.09	6.00	5.36	11.70	11.99	14.98	18.27
Mixed layer temperature : T_ml (deg.C)												
mean	4.22	3.57	3.41	4.80	7.38	11.17	16.32	18.91	17.77	14.67	11.05	7.37
median	4.57	3.46	3.06	4.16	7.41	10.44	15.45	19.14	16.98	14.40	10.82	7.64
min	0.40	1.19	-0.59	1.97	3.68	7.00	6.70	15.16	12.98	9.48	5.19	3.58
max	6.63	7.00	9.65	13.06	12.42	17.91	22.92	21.80	25.38	19.82	16.17	13.29
s.d.	2.00	1.68	2.18	1.99	1.46	2.41	2.74	1.43	2.57	1.86	1.82	2.41
Mixed layer salinity : S_ml (psu)												
mean	32.42	32.50	32.57	32.62	32.47	31.89	32.36	31.92	32.19	32.20	32.14	32.28
median	32.52	32.45	32.64	32.51	32.28	31.66	31.95	32.03	31.57	31.99	32.23	32.21
min	31.17	31.56	31.37	31.07	31.56	30.27	30.32	30.07	30.97	30.56	30.74	30.99
max	33.48	33.48	34.31	35.25	35.60	34.68	35.99	33.71	35.97	35.92	34.73	34.45
s.d.	0.52	0.54	0.67	0.76	0.72	0.99	1.44	0.65	1.40	0.84	0.90	0.84
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.69	25.82	25.88	25.78	25.36	24.29	23.61	22.69	23.14	23.87	24.52	25.20
median	25.72	25.82	25.88	25.78	25.31	24.38	23.55	22.84	23.02	23.79	24.59	25.25
min	24.95	25.27	25.18	24.57	24.70	22.51	21.76	20.83	21.96	22.30	23.51	24.29
max	26.27	26.40	26.73	26.57	27.00	25.32	25.28	23.84	24.91	25.77	25.54	25.91
s.d.	0.32	0.33	0.37	0.41	0.45	0.70	0.63	0.58	0.62	0.56	0.61	0.46

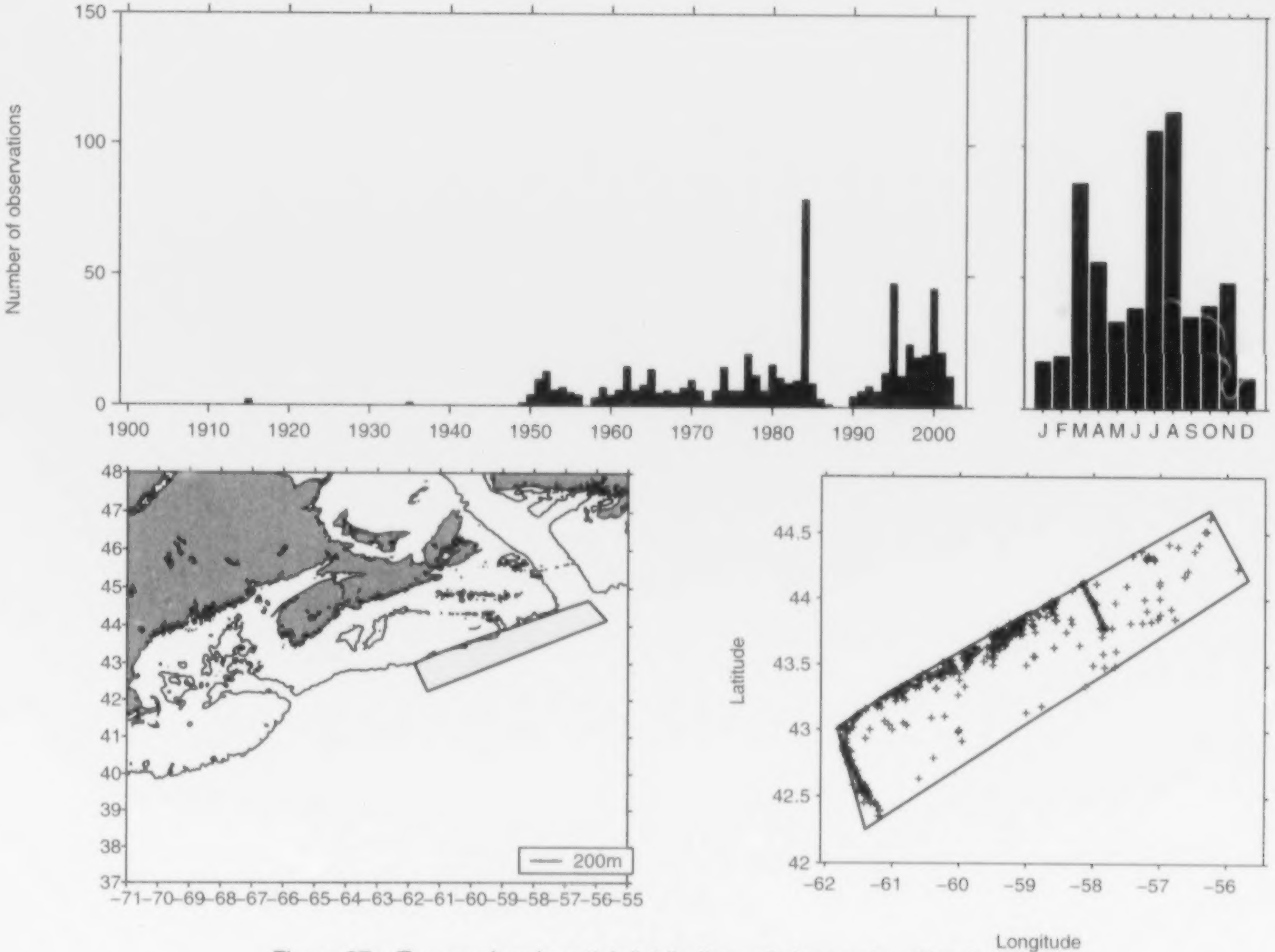

Figure 37a. Temporal and spatial distributions of observed profiles for SS34.

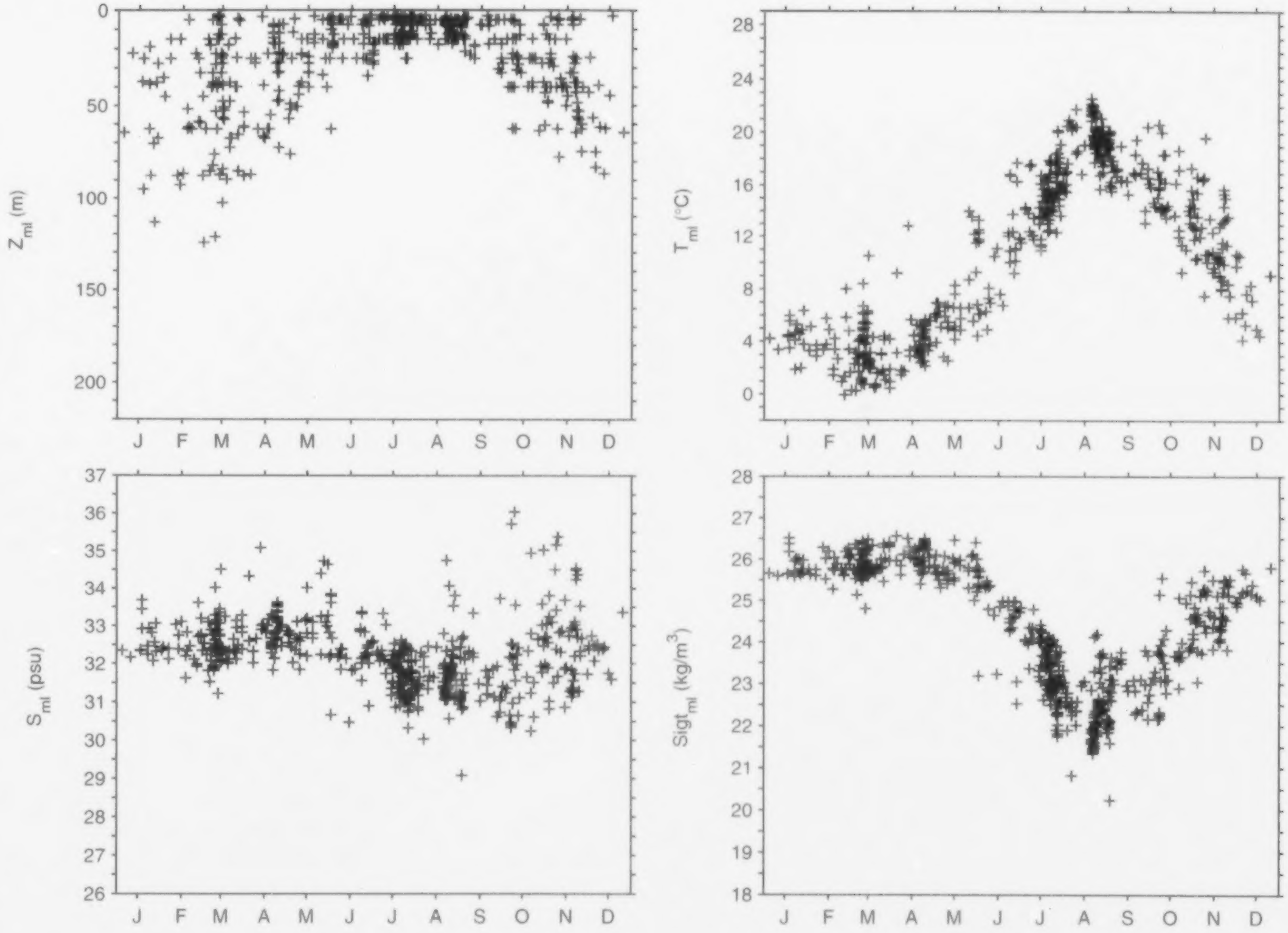

Figure 37b. Calculated mixed layer characteristics for SS34.

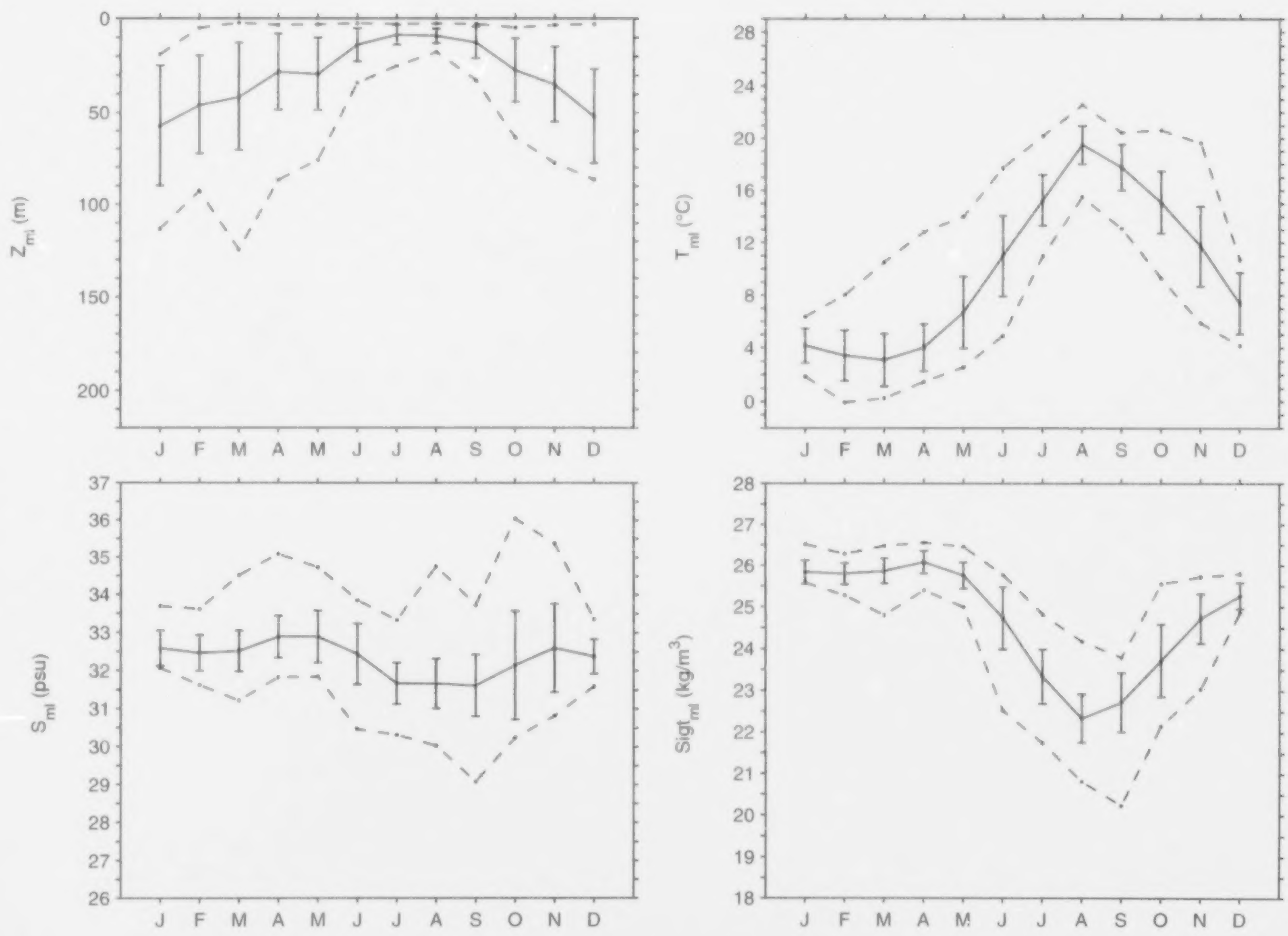

Figure 37c. Monthly statistics of mixed layer characteristics for SS34 (– : mean±sd; –– : min,max).

Table 35. Monthly statistics of mixed layer characteristics for SS34.

Profiles extracted (#) : 909 Profiles retained (#) : 604 Profiles rejected (%) : 33.6
Mean seabed depth (m) for subregion : 2302.7 Mean sounding depth (m) for profiles : 1755.7

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	18	20	86	55	34	38	106	106	42	39	48	12
Mixed layer depth : Z_ml (m)												
mean	57.33	45.95	41.65	28.16	29.38	13.86	8.67	9.21	12.65	27.31	34.83	52.03
median	50.50	48.38	39.00	22.50	25.00	13.50	7.50	7.88	8.47	25.00	37.50	59.00
min	19.00	5.00	2.25	3.50	3.25	2.50	3.00	2.70	3.00	4.90	3.50	3.00
max	113.40	92.70	124.60	86.90	76.00	34.00	25.00	17.75	32.50	63.50	77.50	86.50
s.d.	32.60	26.39	28.81	20.11	19.19	8.66	5.25	3.80	8.31	16.81	20.01	25.56
Mixed layer temperature : T_ml (deg.C)												
mean	4.16	3.44	3.09	4.03	6.69	10.99	15.25	19.50	17.77	15.10	11.75	7.39
median	4.28	3.34	2.76	3.71	6.22	11.70	15.36	19.45	17.66	14.70	11.28	7.46
min	1.89	-0.06	0.26	1.49	2.55	4.90	10.96	15.50	13.10	9.31	5.89	4.17
max	6.35	8.02	10.51	12.82	14.00	17.72	20.17	22.58	20.45	20.63	19.63	10.69
s.d.	1.28	1.89	1.94	1.77	2.73	3.07	1.94	1.49	1.75	2.37	3.06	2.35
Mixed layer salinity : S_ml (psu)												
mean	32.59	32.47	32.52	32.89	32.90	32.44	31.67	31.67	31.61	32.15	32.60	32.38
median	32.41	32.39	32.42	32.86	32.80	32.41	31.63	31.63	31.52	31.97	32.62	32.41
min	32.07	31.62	31.22	31.83	31.84	30.47	30.32	30.03	29.08	30.24	30.82	31.59
max	33.68	33.62	34.51	35.09	34.73	33.86	33.33	34.75	33.73	36.04	35.38	33.36
s.d.	0.46	0.47	0.53	0.55	0.69	0.80	0.54	0.65	0.81	1.42	1.16	0.45
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.84	25.80	25.87	26.09	25.76	24.74	23.34	22.34	22.72	23.72	24.72	25.27
median	25.69	25.74	25.82	26.05	25.76	24.75	23.31	22.37	22.82	23.70	24.66	25.18
min	25.58	25.27	24.80	25.40	25.00	22.53	21.75	20.82	20.24	22.16	23.04	24.87
max	26.52	26.29	26.48	26.56	26.46	25.77	24.82	24.18	23.80	25.55	25.73	25.80
s.d.	0.29	0.26	0.31	0.28	0.32	0.74	0.65	0.58	0.70	0.86	0.59	0.32

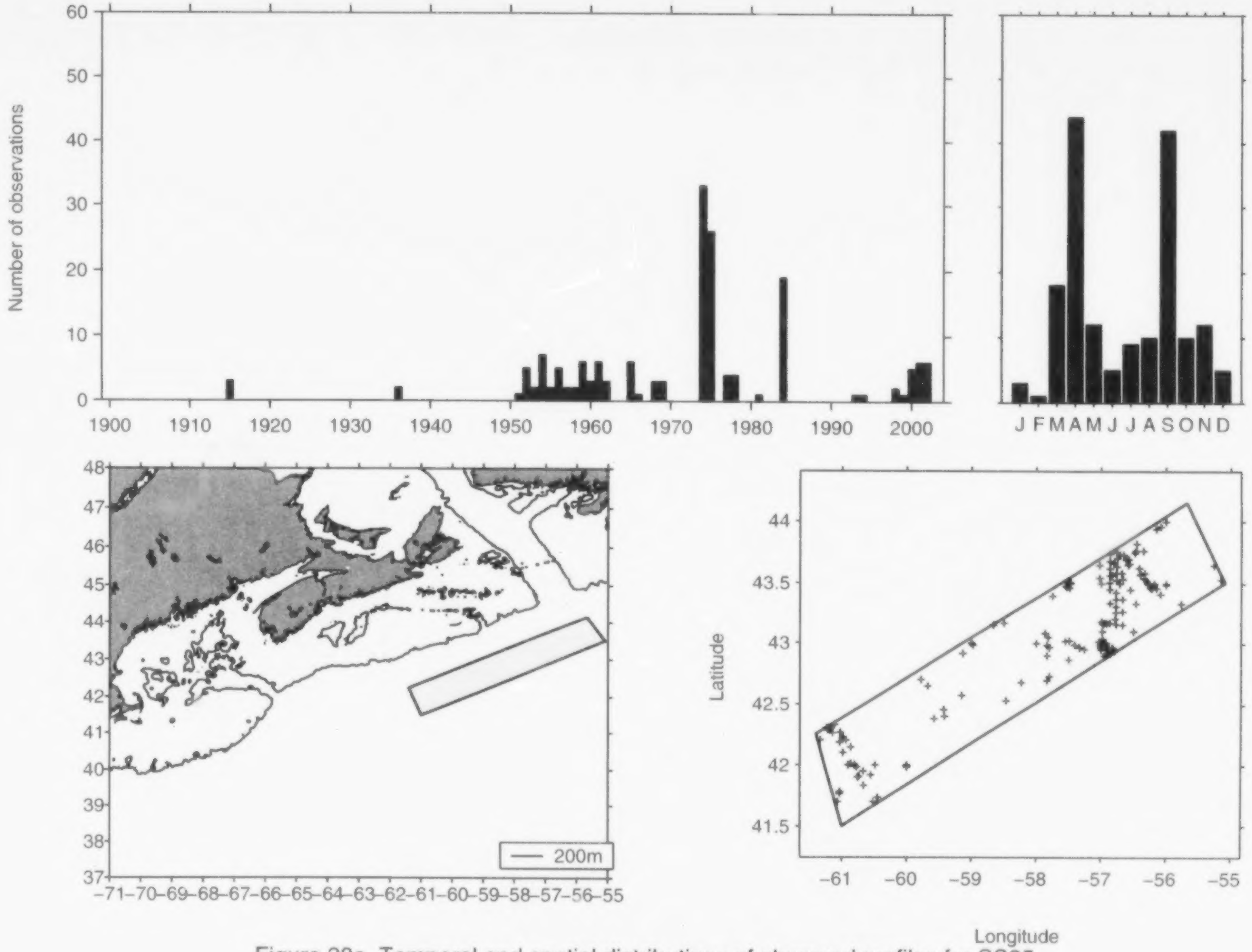

Figure 38a. Temporal and spatial distributions of observed profiles for SS35.

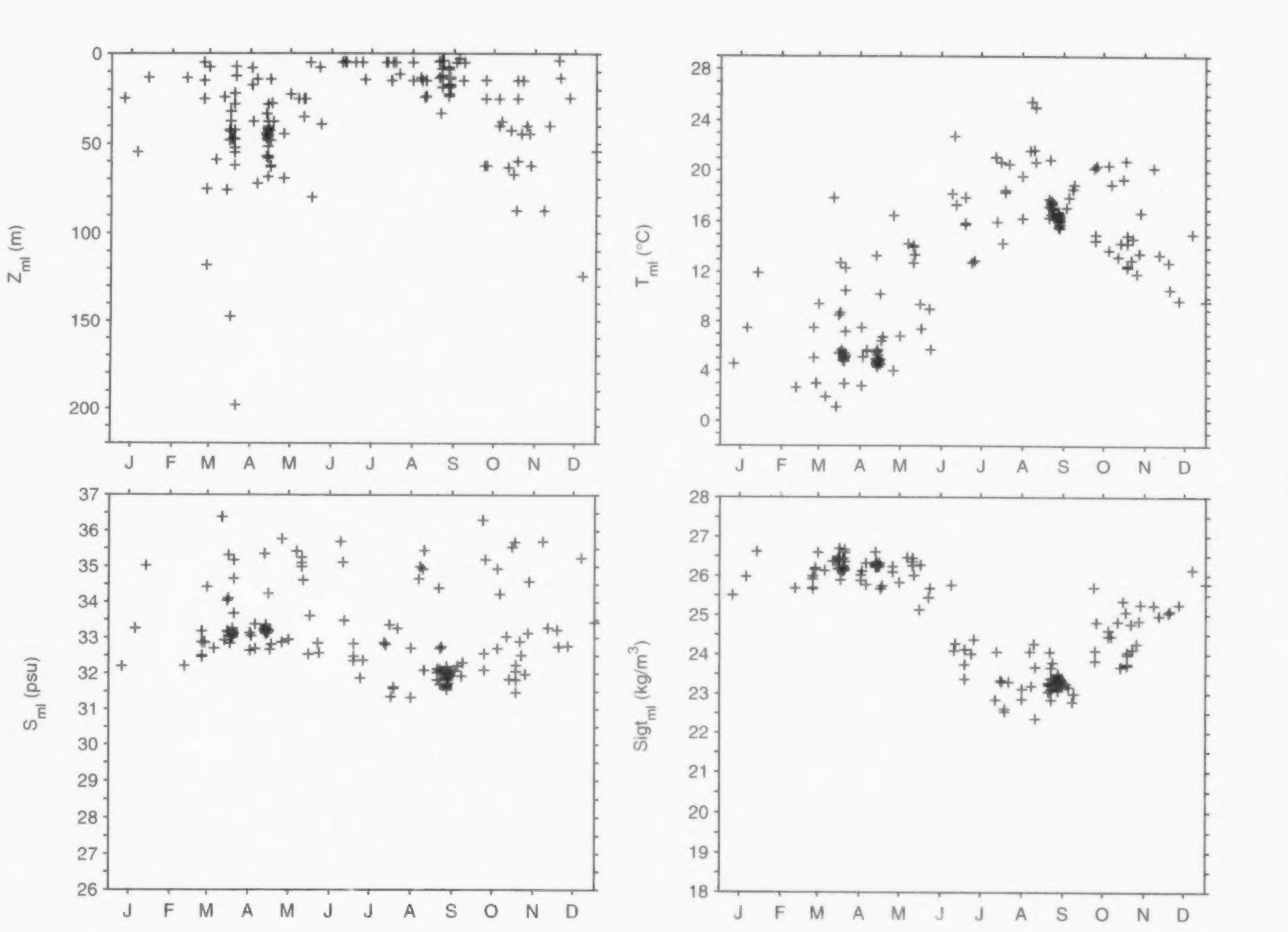

Figure 38b. Calculated mixed layer characteristics for SS35.

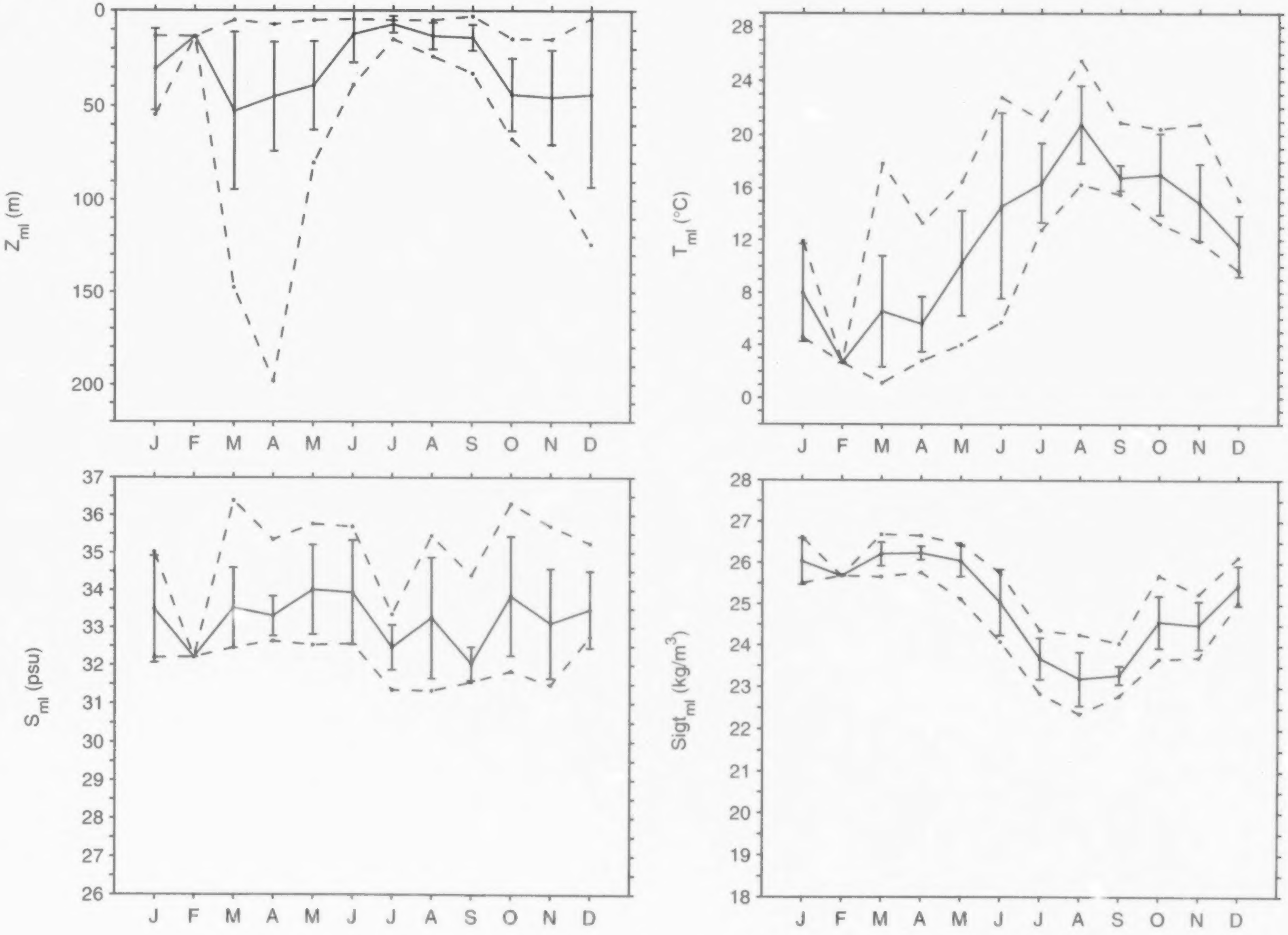

Figure 38c. Monthly statistics of mixed layer characteristics for SS35 (– : mean±sd; –– : min,max).

Table 36. Monthly statistics of mixed layer characteristics for SS35.

Profiles extracted (#) : 324 Profiles retained (#) : 171 Profiles rejected (%) : 47.2
Mean seabed depth (m) for subregion : 3956.8 Mean sounding depth (m) for profiles : 3869.4

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	3	1	17	44	13	5	9	10	42	10	12	5
Mixed layer depth : Z_ml (m)												
mean	30.87	13.50	52.82	45.19	39.34	12.26	7.17	13.25	14.14	44.08	45.54	44.14
median	24.60	13.50	42.25	44.92	35.00	5.00	5.00	14.25	14.47	41.25	42.23	24.50
min	13.30	13.50	5.00	7.30	5.00	4.50	5.00	5.00	3.00	14.75	15.00	4.00
max	54.70	13.50	147.50	198.10	80.00	39.00	15.00	24.00	33.00	67.50	87.50	124.35
s.d.	NaN	NaN	41.54	28.71	23.28	15.00	4.30	6.97	6.79	19.02	24.85	48.67
Mixed layer temperature : T_ml (deg.C)												
mean	7.98	2.67	6.56	5.59	10.25	14.60	16.38	20.77	16.79	17.03	14.88	11.58
median	7.47	2.67	5.41	5.00	9.40	17.33	15.90	20.62	16.55	16.98	13.92	10.62
min	4.54	2.67	1.14	2.80	4.01	5.70	12.77	16.28	15.53	13.25	11.91	9.67
max	11.93	2.67	17.85	13.31	16.48	22.78	21.10	25.48	20.91	20.45	20.81	15.08
s.d.	NaN	NaN	4.23	2.11	4.03	7.03	3.02	2.88	0.96	3.06	2.95	2.33
Mixed layer salinity : S_ml (psu)												
mean	33.49	32.21	33.53	33.32	34.02	33.95	32.48	33.26	32.04	33.85	33.11	33.48
median	33.26	32.21	33.16	33.18	33.61	33.48	32.48	32.99	32.01	33.63	32.70	33.22
min	32.20	32.21	32.47	32.64	32.54	32.58	31.35	31.33	31.55	31.84	31.47	32.75
max	35.02	32.21	36.39	35.35	35.77	35.70	33.36	35.45	34.39	36.30	35.70	35.24
s.d.	NaN	NaN	1.07	0.54	1.20	1.39	0.59	1.62	0.45	1.59	1.46	1.03
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	26.03	25.69	26.22	26.24	26.06	25.05	23.68	23.20	23.29	24.58	24.50	25.46
median	25.98	25.69	26.19	26.26	26.23	25.44	23.74	23.16	23.27	24.53	24.51	25.26
min	25.50	25.69	25.66	25.77	25.13	24.09	22.84	22.36	22.79	23.67	23.71	25.05
max	26.62	25.69	26.69	26.66	26.46	25.76	24.37	24.26	24.06	25.70	25.25	26.14
s.d.	NaN	NaN	0.29	0.16	0.38	0.80	0.50	0.64	0.22	0.63	0.58	0.48

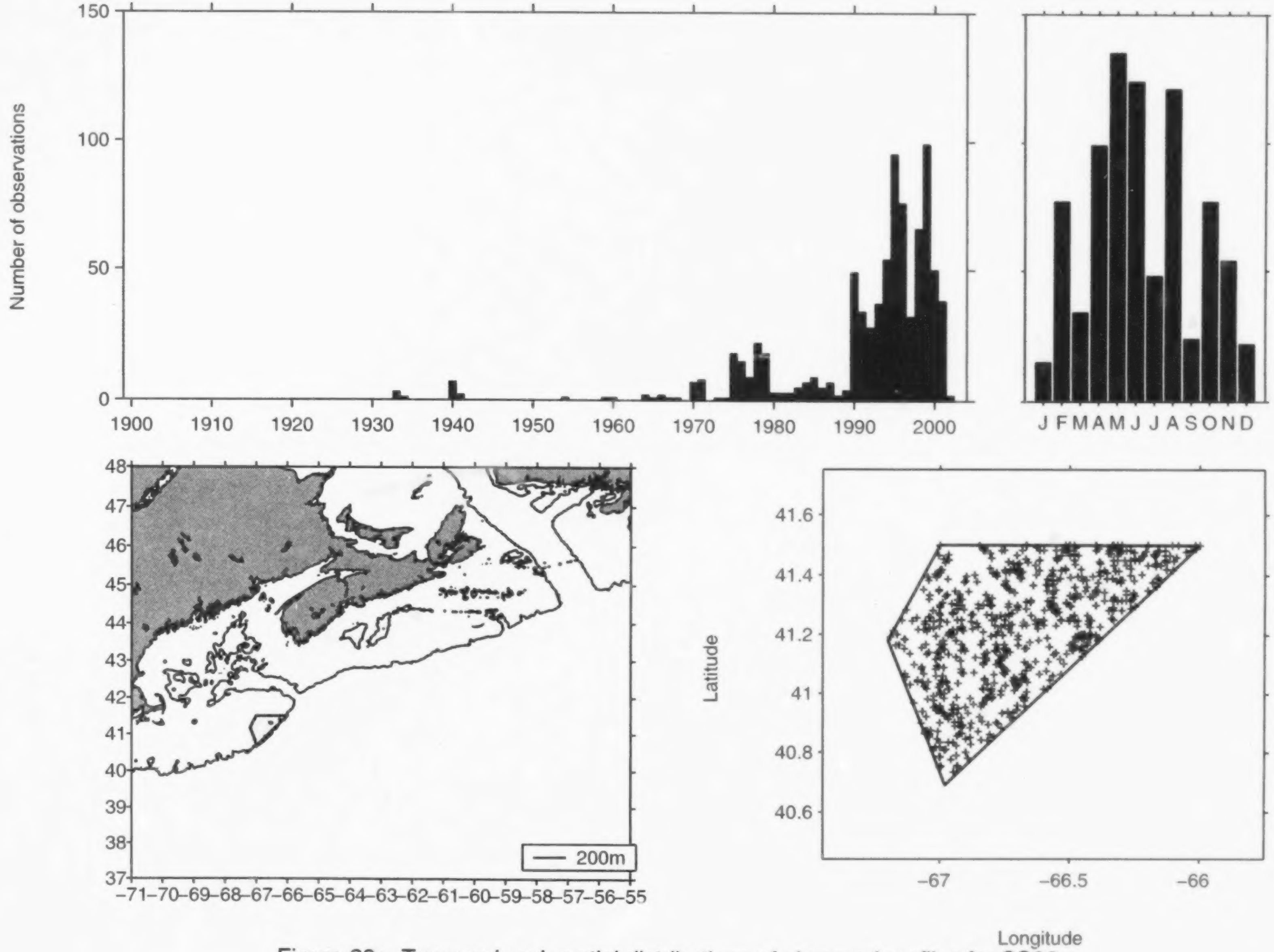

Figure 39a. Temporal and spatial distributions of observed profiles for SS36.

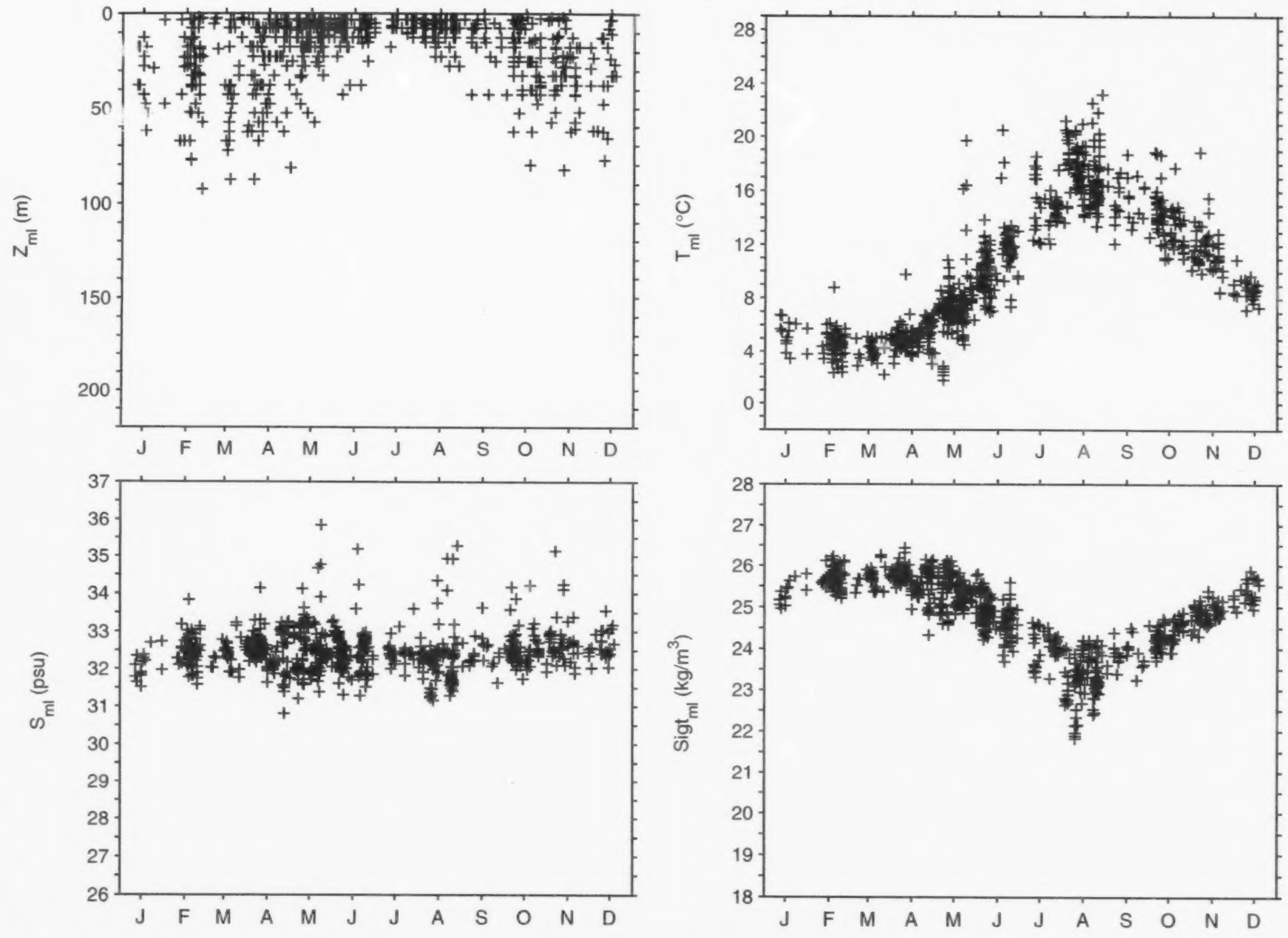

Figure 39b. Calculated mixed layer characteristics for SS36.

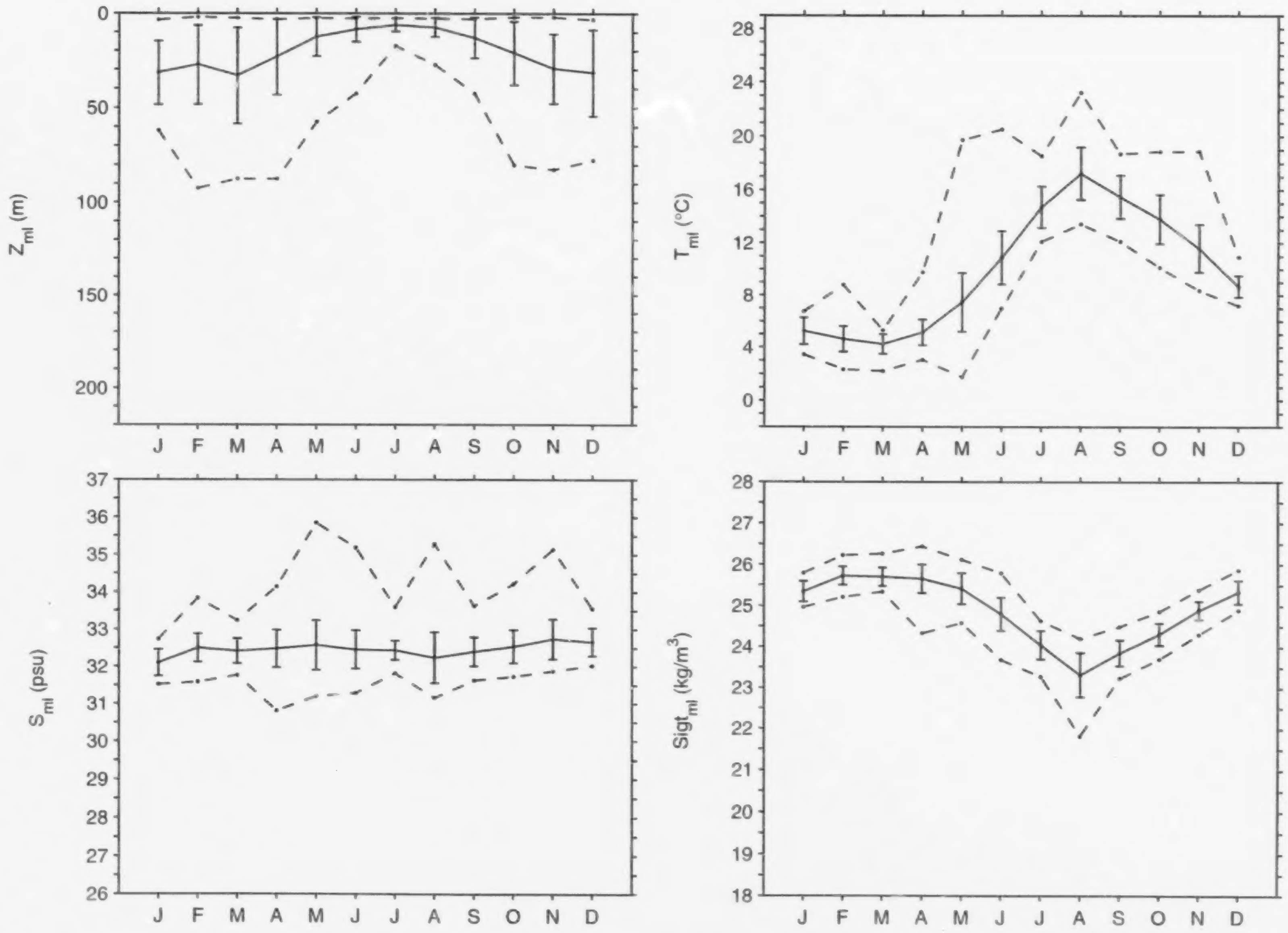

Figure 39c. Monthly statistics of mixed layer characteristics for SS36 (– : mean±sd; –– : min,max).

Table 37. Monthly statistics of mixed layer characteristics for SS36.

Profiles extracted (#) : 1346 Profiles retained (#) : 830 Profiles rejected (%) : 38.3
Mean seabed depth (m) for subregion : 91.5 Mean sounding depth (m) for profiles : 93.6

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	15	77	34	99	135	124	48	121	24	77	54	22
Mixed layer depth : Z_ml (m)												
mean	31.62	27.39	33.13	23.22	12.50	8.51	6.14	7.43	12.99	21.15	29.37	31.54
median	28.50	22.50	37.50	17.50	7.75	7.50	7.20	7.50	7.88	17.50	28.00	29.50
min	3.50	2.00	2.50	3.25	2.50	2.75	2.50	2.75	3.00	2.05	2.00	3.25
max	62.00	92.50	87.50	87.50	57.50	42.50	17.50	27.50	42.50	80.00	82.50	77.50
s.d.	16.75	20.91	25.33	20.10	10.38	6.69	3.44	5.10	10.90	16.87	18.37	22.80
Mixed layer temperature : T_ml (deg.C)												
mean	5.24	4.62	4.24	5.14	7.47	10.87	14.71	17.24	15.47	13.80	11.59	8.69
median	5.50	4.58	4.26	5.10	7.31	11.02	14.74	16.99	15.62	13.79	11.48	8.63
min	3.44	2.33	2.20	3.05	1.76	6.98	12.10	13.43	12.11	10.14	8.37	7.20
max	6.75	8.78	5.29	9.76	19.73	20.52	18.55	23.22	18.70	18.88	18.89	10.94
s.d.	1.02	0.97	0.75	0.98	2.26	2.03	1.55	1.96	1.63	1.85	1.80	0.82
Mixed layer salinity : S_ml (psu)												
mean	32.10	32.50	32.42	32.48	32.58	32.46	32.44	32.24	32.41	32.54	32.74	32.67
median	32.10	32.51	32.43	32.53	32.51	32.50	32.42	32.24	32.29	32.47	32.69	32.57
min	31.51	31.59	31.77	30.81	31.20	31.29	31.82	31.16	31.63	31.74	31.88	32.03
max	32.73	33.83	33.24	34.14	35.85	35.19	33.60	35.28	33.63	34.22	35.14	33.55
s.d.	0.36	0.38	0.33	0.50	0.67	0.51	0.26	0.68	0.39	0.44	0.54	0.37
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.34	25.73	25.70	25.66	25.42	24.80	24.05	23.32	23.86	24.31	24.90	25.34
median	25.37	25.75	25.71	25.73	25.47	24.80	24.12	23.32	23.87	24.29	24.92	25.29
min	24.96	25.21	25.34	24.33	24.58	23.69	23.28	21.83	23.24	23.71	24.30	24.90
max	25.79	26.23	26.26	26.44	26.12	25.80	24.64	24.21	24.50	24.87	25.39	25.87
s.d.	0.25	0.22	0.22	0.34	0.38	0.40	0.35	0.54	0.31	0.27	0.22	0.28

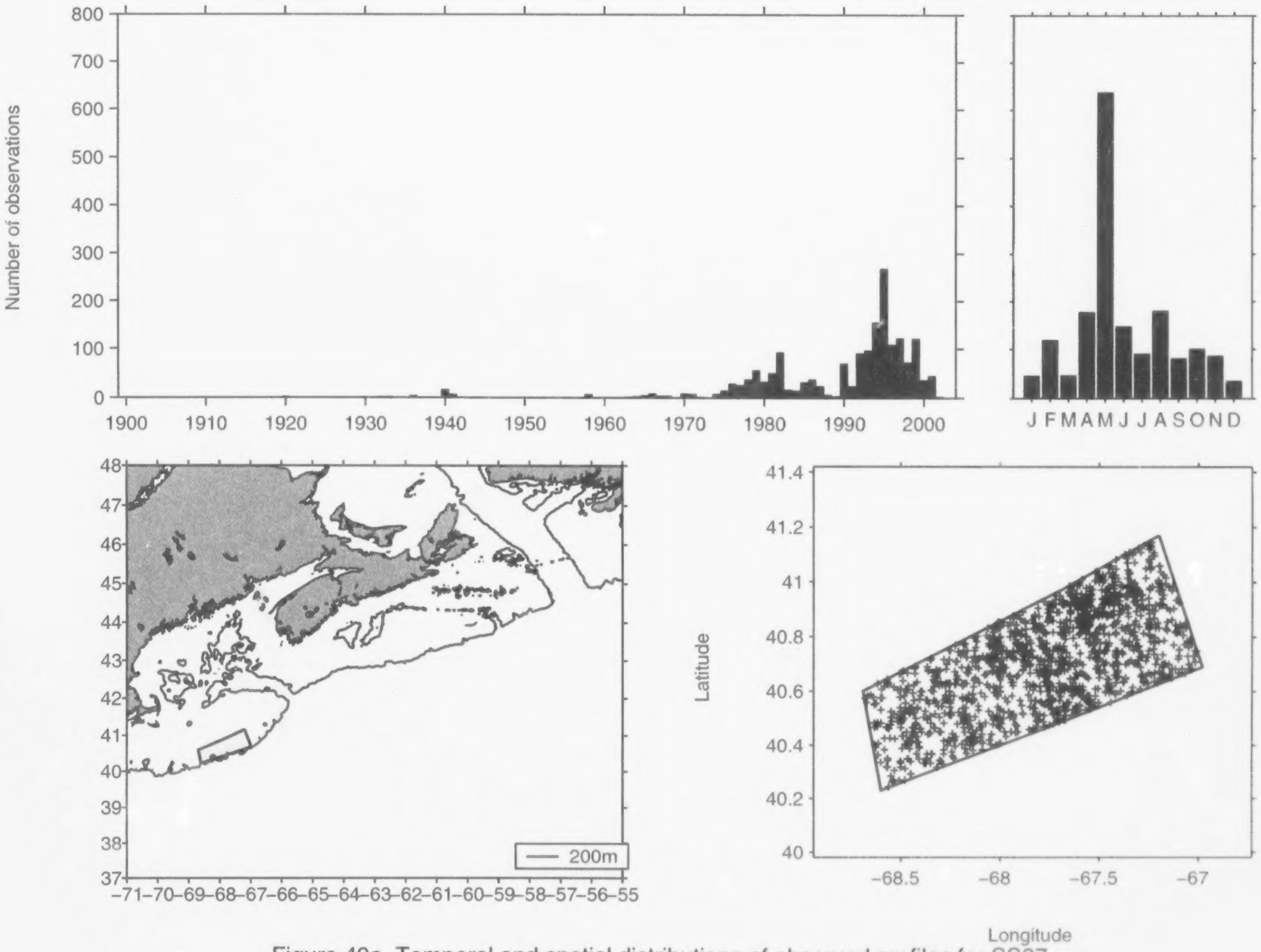

Figure 40a. Temporal and spatial distributions of observed profiles for SS37.

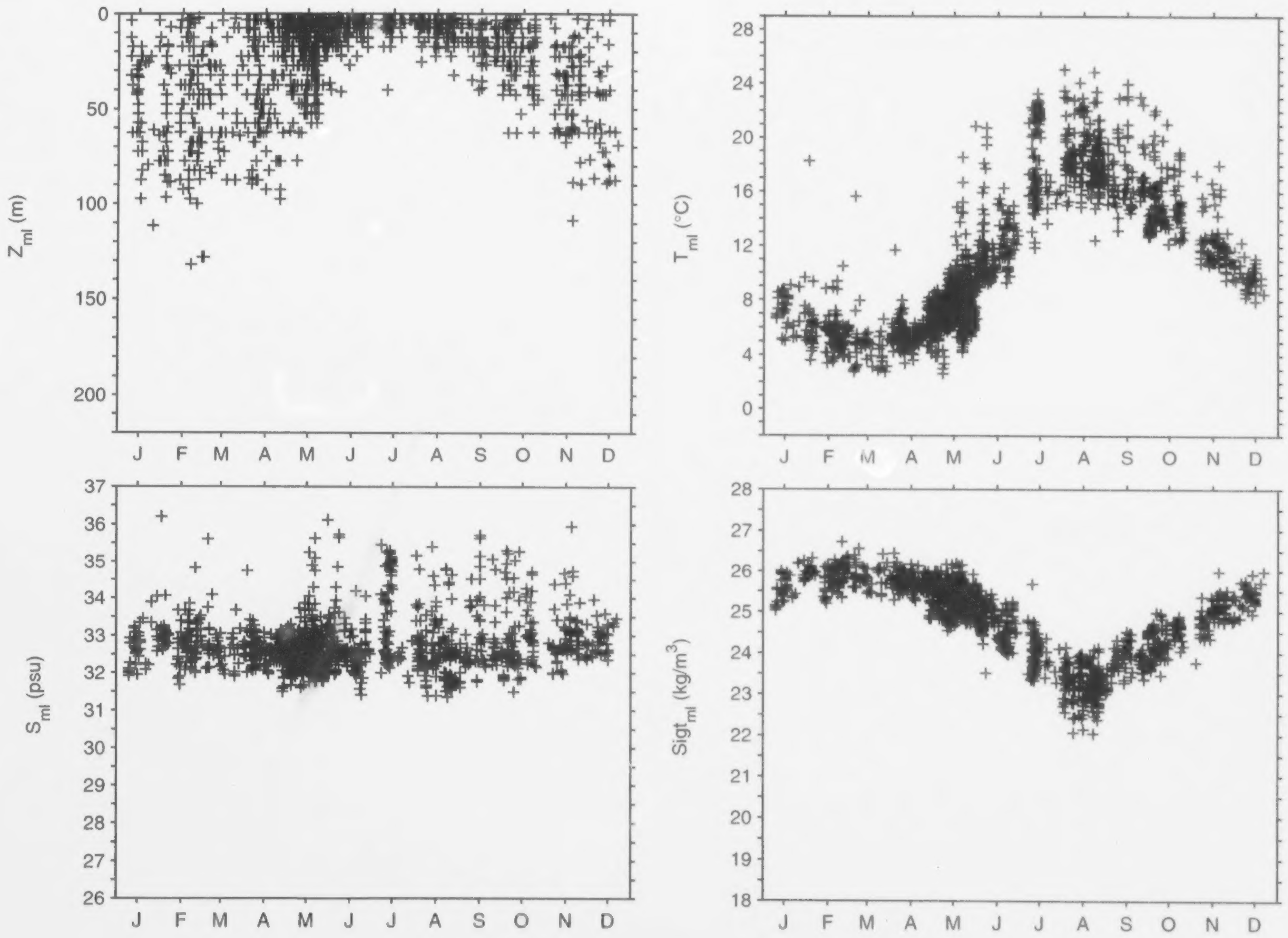

Figure 40b. Calculated mixed layer characteristics for SS37.

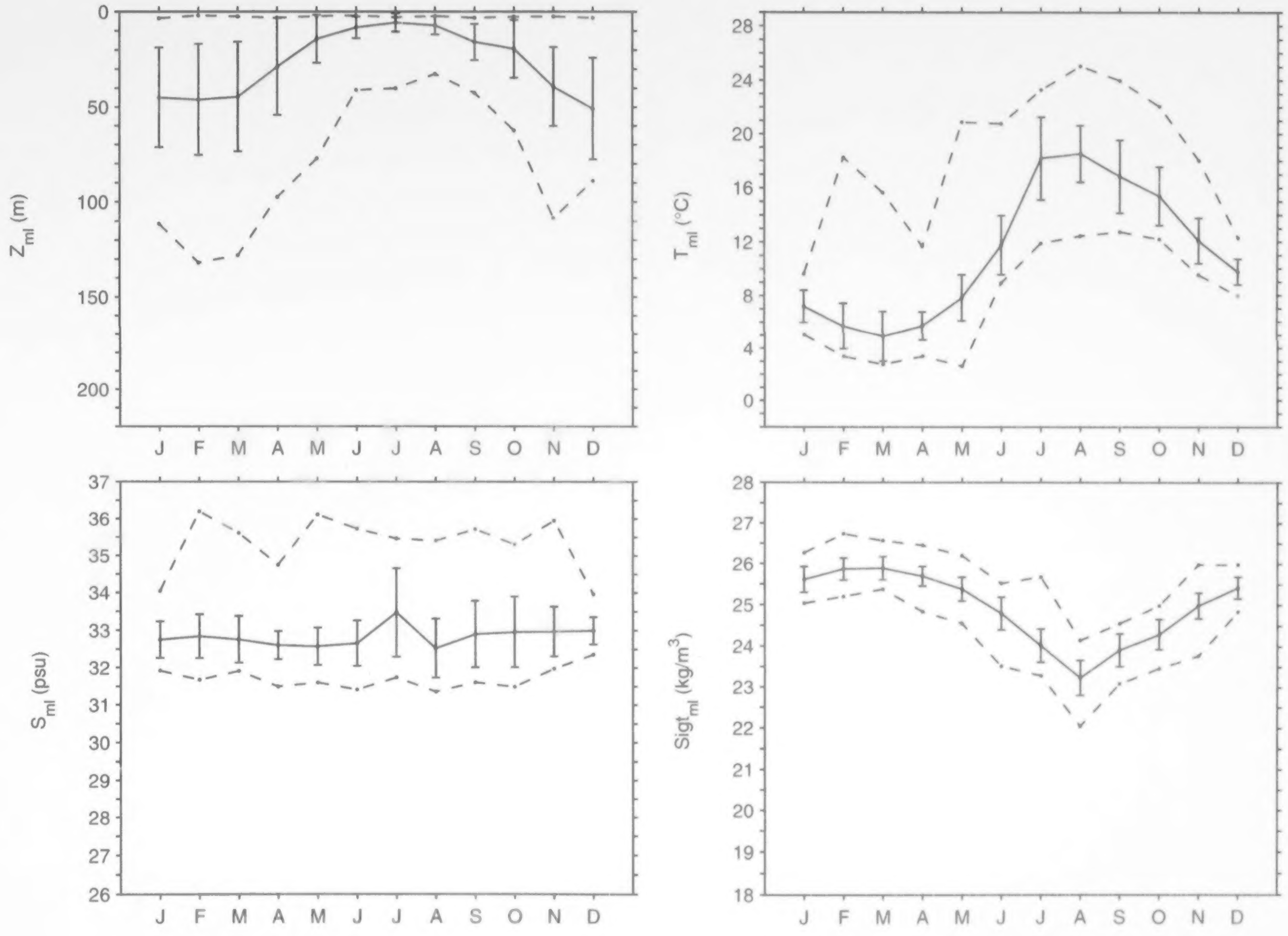

Figure 40c. Monthly statistics of mixed layer characteristics for SS37 (– : mean±sd; -- : min,max).

Table 38. Monthly statistics of mixed layer characteristics for SS37.

Profiles extracted (#) : 2406 Profiles retained (#) : 1742 Profiles rejected (%) : 27.6
Mean seabed depth (m) for subregion : 93.4 Mean sounding depth (m) for profiles : 101.4

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	45	112	52	177	635	149	90	176	85	100	86	35
Mixed layer depth : Z_ml (m)												
mean	45.02	46.11	44.63	28.77	14.23	8.22	5.71	7.17	15.82	19.43	39.25	50.86
median	40.00	45.00	42.50	17.50	12.50	7.50	3.50	7.30	15.00	15.75	37.50	59.50
min	3.50	2.00	2.50	3.25	2.35	2.00	3.00	2.25	3.25	2.75	2.50	3.25
max	111.50	132.00	128.00	97.50	77.25	41.00	40.00	32.50	42.50	62.50	108.50	89.00
s.d.	26.32	29.32	28.93	25.44	12.56	5.68	4.75	4.75	9.40	15.06	20.80	26.80
Mixed layer temperature : T_ml (deg.C)												
mean	7.19	5.70	4.91	5.70	7.83	11.75	18.19	18.53	16.85	15.40	12.08	9.77
median	7.25	5.49	4.88	5.57	7.81	11.20	17.18	18.08	16.27	14.77	11.69	9.68
min	5.04	3.39	2.77	3.40	2.64	8.94	11.91	12.45	12.75	12.21	9.55	7.98
max	9.63	18.24	15.64	11.68	20.88	20.77	23.30	25.06	23.99	22.06	18.02	12.31
s.d.	1.21	1.72	1.90	1.07	1.72	2.20	3.07	2.10	2.70	2.16	1.70	0.96
Mixed layer salinity : S_ml (psu)												
mean	32.75	32.84	32.76	32.61	32.58	32.66	33.48	32.52	32.90	32.96	32.97	33.00
median	32.81	32.81	32.70	32.64	32.53	32.58	32.96	32.45	32.57	32.60	32.76	33.03
min	31.92	31.67	31.92	31.49	31.60	31.41	31.74	31.36	31.61	31.49	31.98	32.36
max	34.05	36.20	35.61	34.75	36.12	35.73	35.47	35.41	35.72	35.31	35.95	33.96
s.d.	0.48	0.58	0.62	0.37	0.50	0.61	1.18	0.79	0.89	0.94	0.66	0.36
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.61	25.87	25.89	25.69	25.38	24.79	24.02	23.23	23.91	24.29	24.99	25.42
median	25.53	25.91	25.89	25.71	25.37	24.88	24.04	23.26	23.90	24.28	24.99	25.44
min	25.03	25.20	25.37	24.83	24.55	23.51	23.28	22.05	23.08	23.46	23.77	24.84
max	26.26	26.73	26.57	26.45	26.20	25.52	25.68	24.14	24.55	24.98	25.98	25.99
s.d.	0.31	0.27	0.29	0.24	0.29	0.39	0.40	0.43	0.40	0.37	0.31	0.27

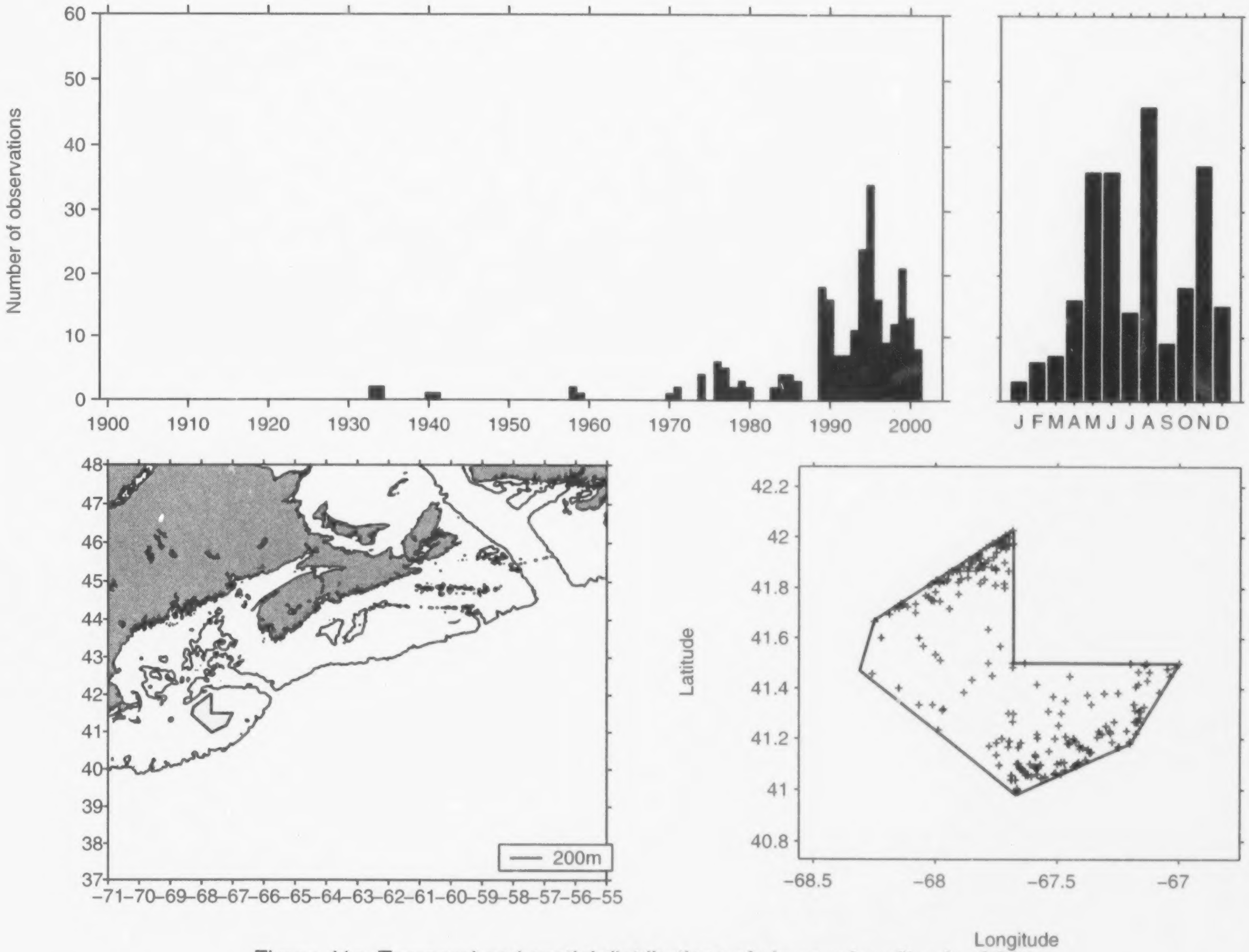

Figure 41a. Temporal and spatial distributions of observed profiles for SS38.

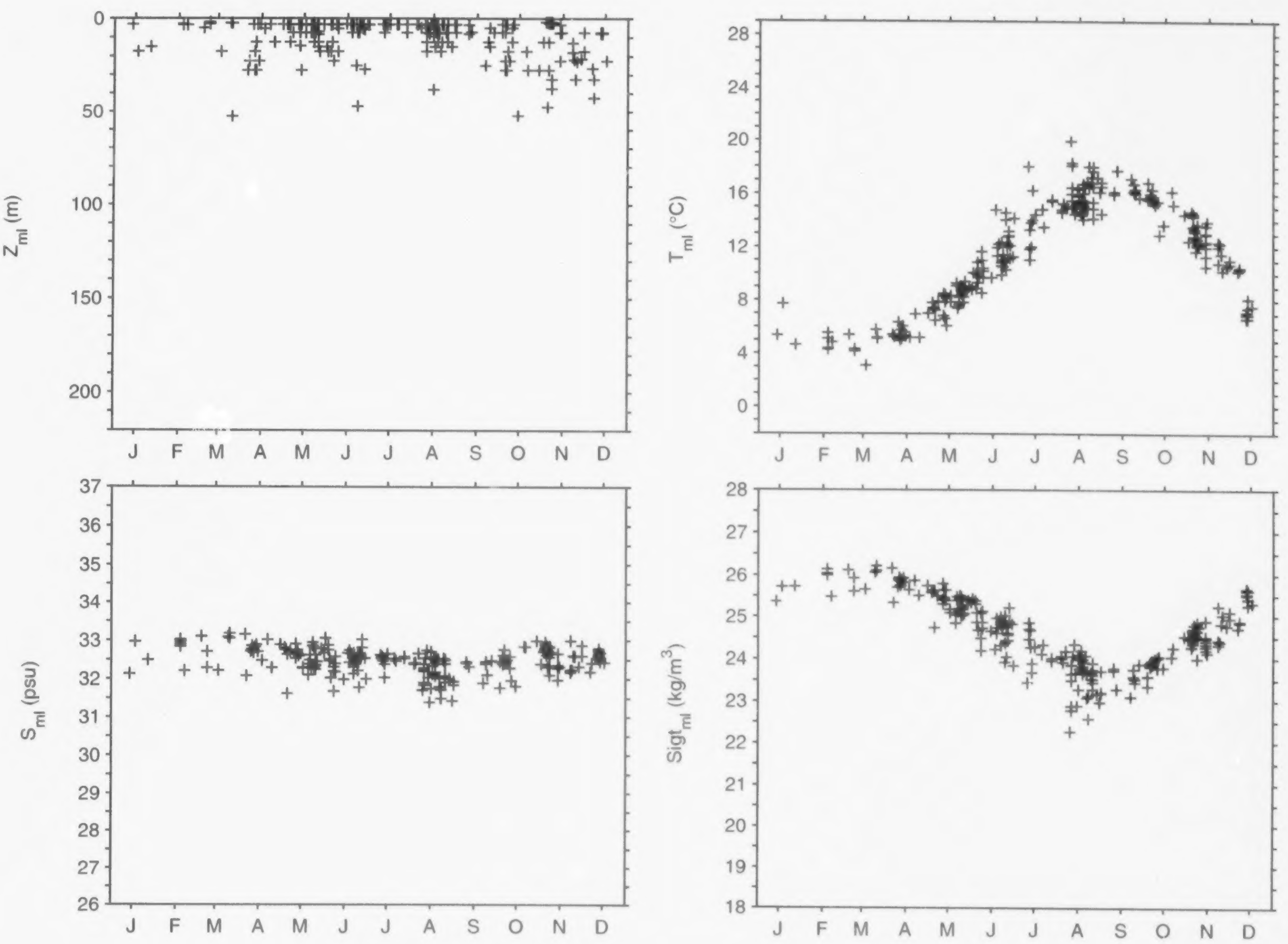

Figure 41b. Calculated mixed layer characteristics for SS38.

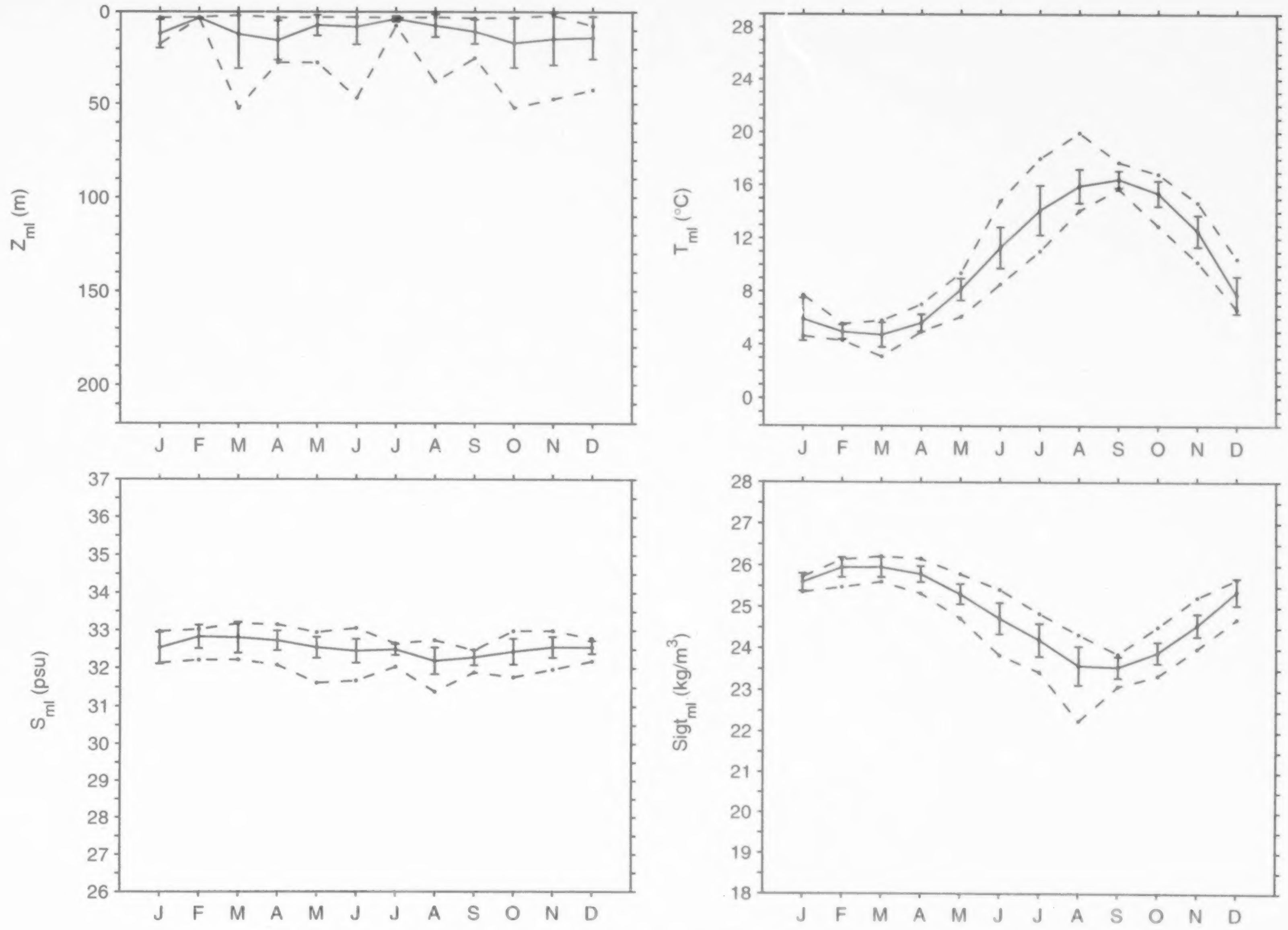

Figure 41c. Monthly statistics of mixed layer characteristics for SS38 (– : mean±sd; -- : min,max).

Table 39. Monthly statistics of mixed layer characteristics for SS38.

Profiles extracted (#) : 1599 Profiles retained (#) : 243 Profiles rejected (%) : 84.8
Mean seabed depth (m) for subregion : 45.9 Mean sounding depth (m) for profiles : 48.7

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	3	6	7	16	35	37	14	46	9	17	38	15
Mixed layer depth : Z_ml (m)												
mean	11.92	3.42	12.14	15.42	7.27	8.17	3.88	7.49	10.72	16.93	14.68	13.94
median	15.00	3.50	3.00	15.00	3.75	3.50	3.25	7.50	8.25	17.50	7.62	8.00
min	3.25	3.00	2.00	3.25	3.00	3.00	3.25	3.00	3.50	3.25	2.00	7.50
max	17.50	3.50	52.50	27.50	27.50	47.00	7.50	38.00	25.00	52.25	47.50	42.50
s.d.	NaN	0.20	18.62	10.62	5.57	9.42	1.54	6.17	6.54	13.34	14.00	11.38
Mixed layer temperature : T_ml (deg.C)												
mean	5.90	4.95	4.73	5.63	8.16	11.31	14.12	15.95	16.45	15.39	12.58	7.75
median	5.35	4.98	5.13	5.34	8.32	11.04	13.95	15.53	16.19	15.57	12.46	7.04
min	4.64	4.30	3.09	4.98	6.09	8.55	11.05	14.09	15.72	12.95	10.24	6.67
max	7.72	5.54	5.80	7.02	9.40	14.80	18.03	19.95	17.74	16.85	14.71	10.48
s.d.	NaN	0.55	0.92	0.64	0.83	1.55	1.86	1.28	0.64	0.95	1.19	1.40
Mixed layer salinity : S_ml (psu)												
mean	32.53	32.83	32.81	32.73	32.55	32.46	32.50	32.20	32.29	32.44	32.56	32.56
median	32.49	32.94	33.06	32.76	32.62	32.51	32.53	32.27	32.39	32.44	32.60	32.54
min	32.13	32.21	32.22	32.08	31.62	31.68	32.04	31.39	31.90	31.77	31.97	32.18
max	32.97	33.02	33.18	33.16	32.95	33.06	32.65	32.74	32.47	32.99	32.99	32.79
s.d.	NaN	0.31	0.41	0.26	0.28	0.31	0.15	0.35	0.20	0.34	0.27	0.17
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.60	25.95	25.96	25.80	25.32	24.73	24.21	23.60	23.56	23.91	24.58	25.38
median	25.72	26.04	26.07	25.85	25.39	24.81	24.27	23.69	23.57	23.89	24.53	25.52
min	25.36	25.48	25.61	25.33	24.73	23.84	23.44	22.27	23.10	23.35	24.00	24.71
max	25.73	26.14	26.22	26.16	25.80	25.43	24.85	24.34	23.88	24.53	25.24	25.68
s.d.	NaN	0.24	0.24	0.19	0.24	0.38	0.40	0.46	0.25	0.25	0.27	0.32

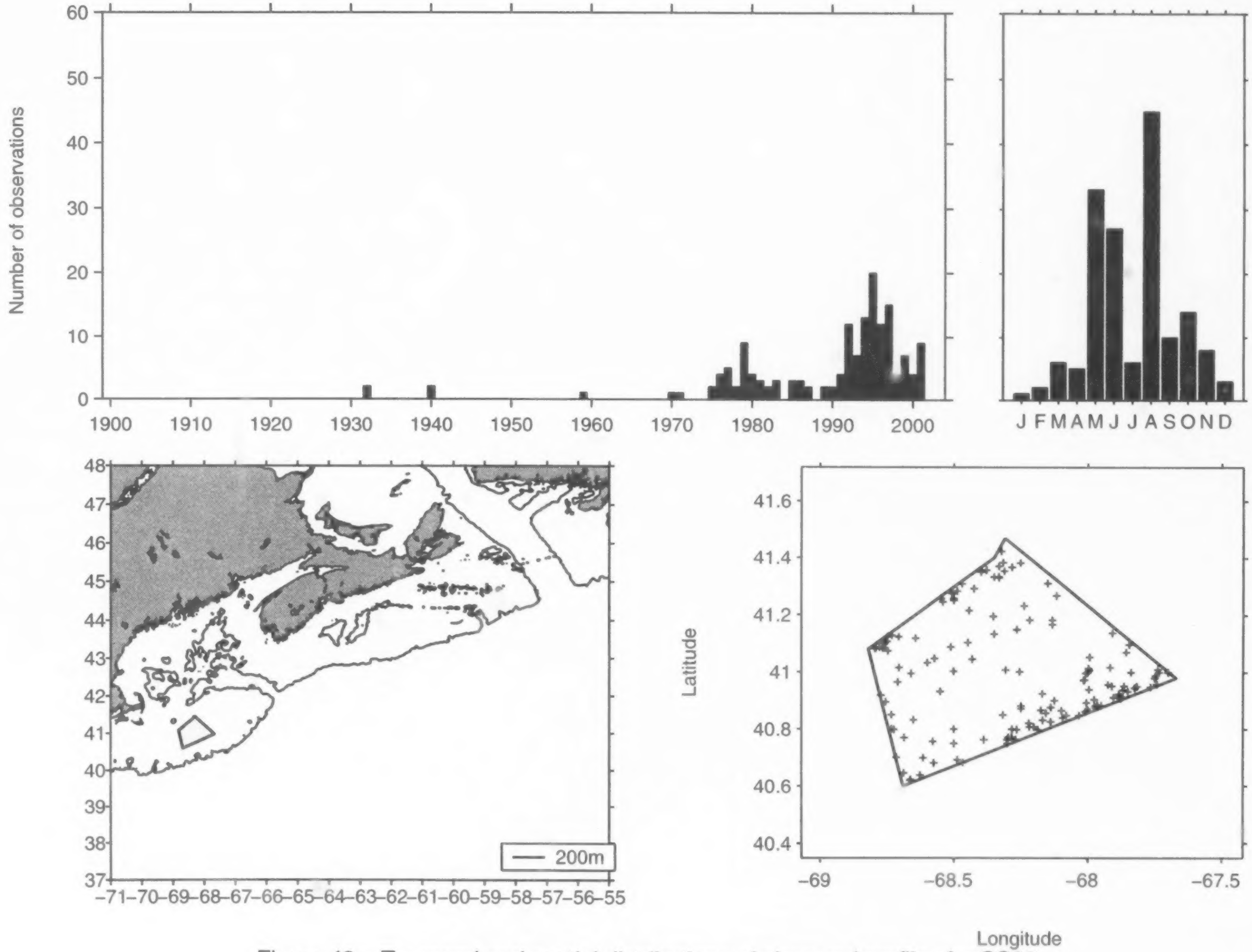

Figure 42a. Temporal and spatial distributions of observed profiles for SS39.

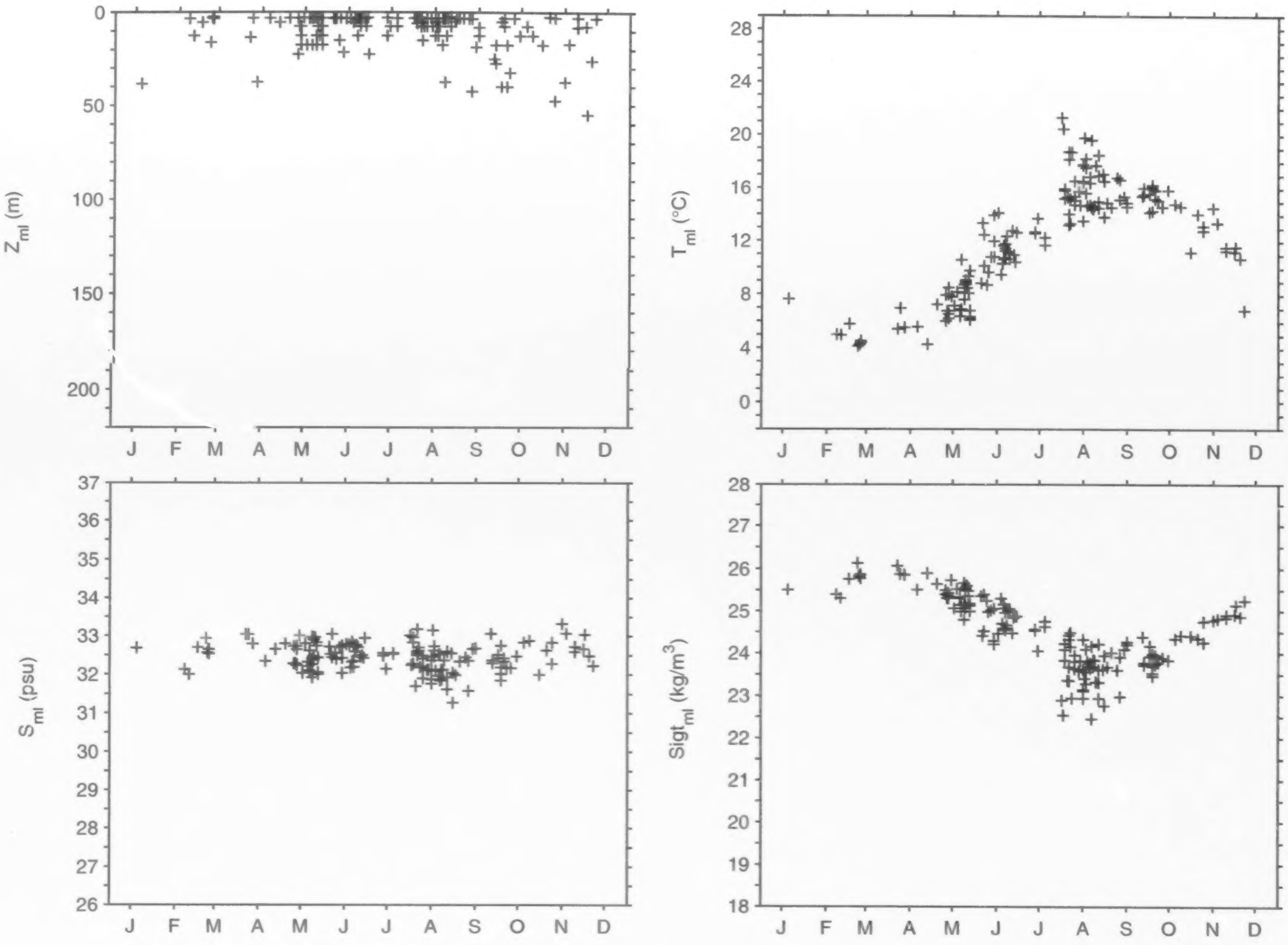

Figure 42b. Calculated mixed layer characteristics for SS39.

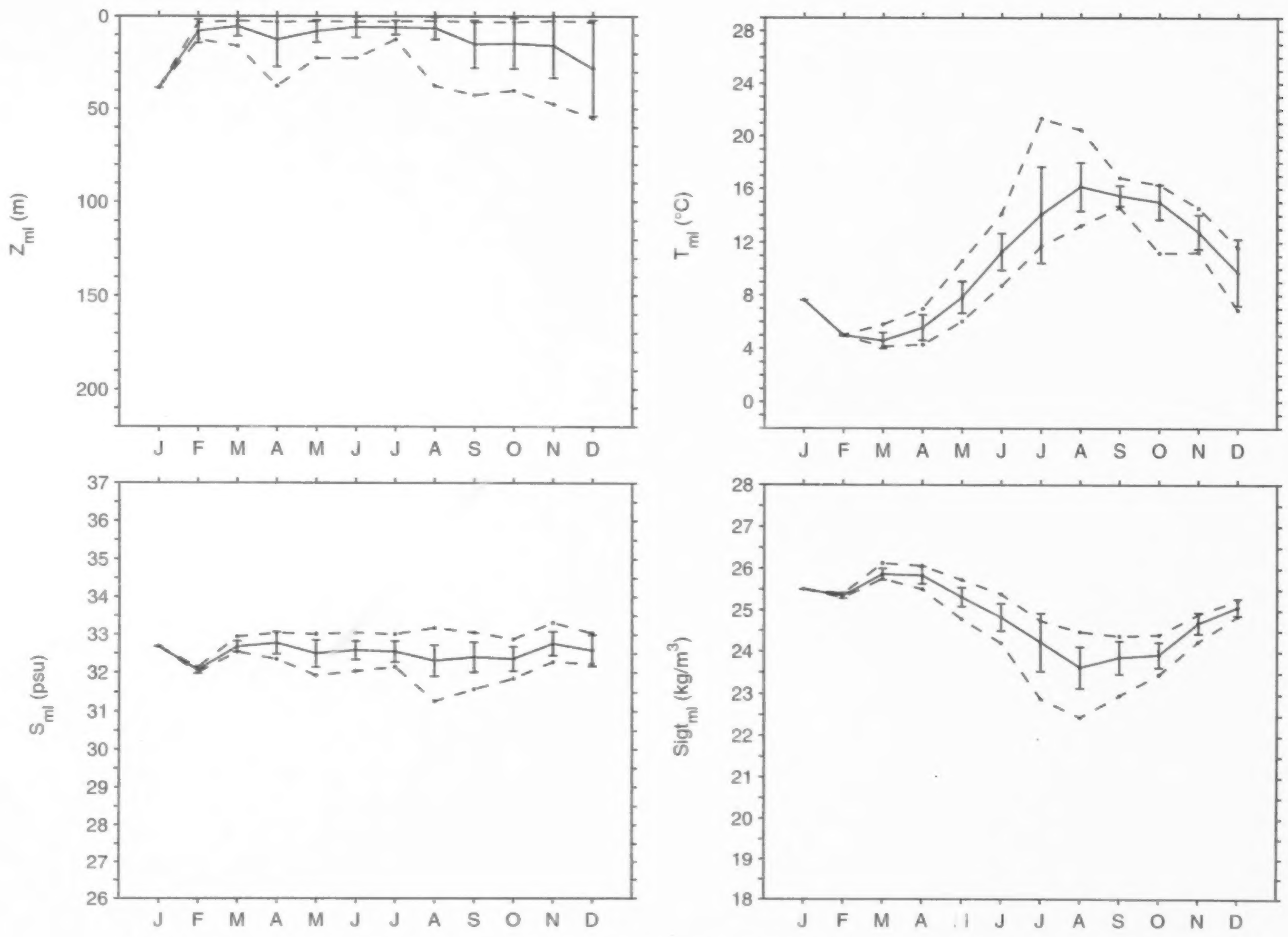

Figure 42c. Monthly statistics of mixed layer characteristics for SS39 (– : mean±sd; –– : min,max).

Table 40. Monthly statistics of mixed layer characteristics for SS39.

Profiles extracted (#) : 1112 Profiles retained (#) : 160 Profiles rejected (%) : 85.6
Mean seabed depth (m) for subregion : 57.2 Mean sounding depth (m) for profiles : 59.7

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	1	2	6	5	33	27	6	44	11	14	8	3
Mixed layer depth : Z_ml (m)												
mean	38.50	8.00	5.58	12.60	8.13	5.87	6.17	6.48	15.00	14.68	15.75	28.08
median	38.50	8.00	3.25	5.50	7.50	3.50	5.38	3.50	12.50	10.00	7.75	26.00
min	38.50	3.50	2.50	3.25	3.00	3.00	3.00	2.50	3.25	3.25	2.50	3.25
max	38.50	12.50	16.00	37.50	22.50	22.50	12.50	37.50	42.50	40.00	47.50	55.00
s.d.	NaN	NaN	5.21	14.54	5.83	5.49	3.76	5.94	12.75	13.43	17.37	NaN
Mixed layer temperature : T_ml (deg.C)												
mean	7.63	5.00	4.60	5.57	7.85	11.28	14.06	16.16	15.46	14.99	12.77	9.74
median	7.63	5.00	4.44	5.55	7.99	11.16	12.65	15.82	15.38	15.15	13.00	10.73
min	7.63	4.97	4.15	4.30	6.05	8.73	11.71	13.23	14.57	11.20	11.25	6.89
max	7.63	5.02	5.80	6.98	10.60	14.12	21.32	20.47	16.83	16.28	14.55	11.61
s.d.	NaN	NaN	0.60	0.95	1.20	1.39	3.62	1.83	0.77	1.30	1.27	NaN
Mixed layer salinity : S_ml (psu)												
mean	32.68	32.07	32.68	32.78	32.50	32.58	32.55	32.31	32.41	32.36	32.76	32.58
median	32.68	32.07	32.65	32.80	32.44	32.60	32.55	32.37	32.37	32.38	32.70	32.48
min	32.68	32.00	32.54	32.35	31.93	32.04	32.15	31.27	31.58	31.85	32.28	32.23
max	32.68	32.13	32.94	33.04	33.01	33.05	33.01	33.18	33.06	32.88	33.32	33.04
s.d.	NaN	NaN	0.14	0.29	0.35	0.24	0.27	0.40	0.39	0.32	0.32	NaN
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.51	25.35	25.87	25.84	25.32	24.84	24.23	23.63	23.87	23.93	24.70	25.08
median	25.51	25.35	25.84	25.88	25.34	24.88	24.55	23.66	23.90	23.90	24.79	25.14
min	25.51	25.30	25.76	25.51	24.79	24.21	22.89	22.45	22.97	23.46	24.25	24.86
max	25.51	25.40	26.13	26.07	25.74	25.40	24.75	24.48	24.38	24.41	24.91	25.25
s.d.	NaN	NaN	0.13	0.20	0.23	0.33	0.70	0.49	0.39	0.30	0.26	NaN

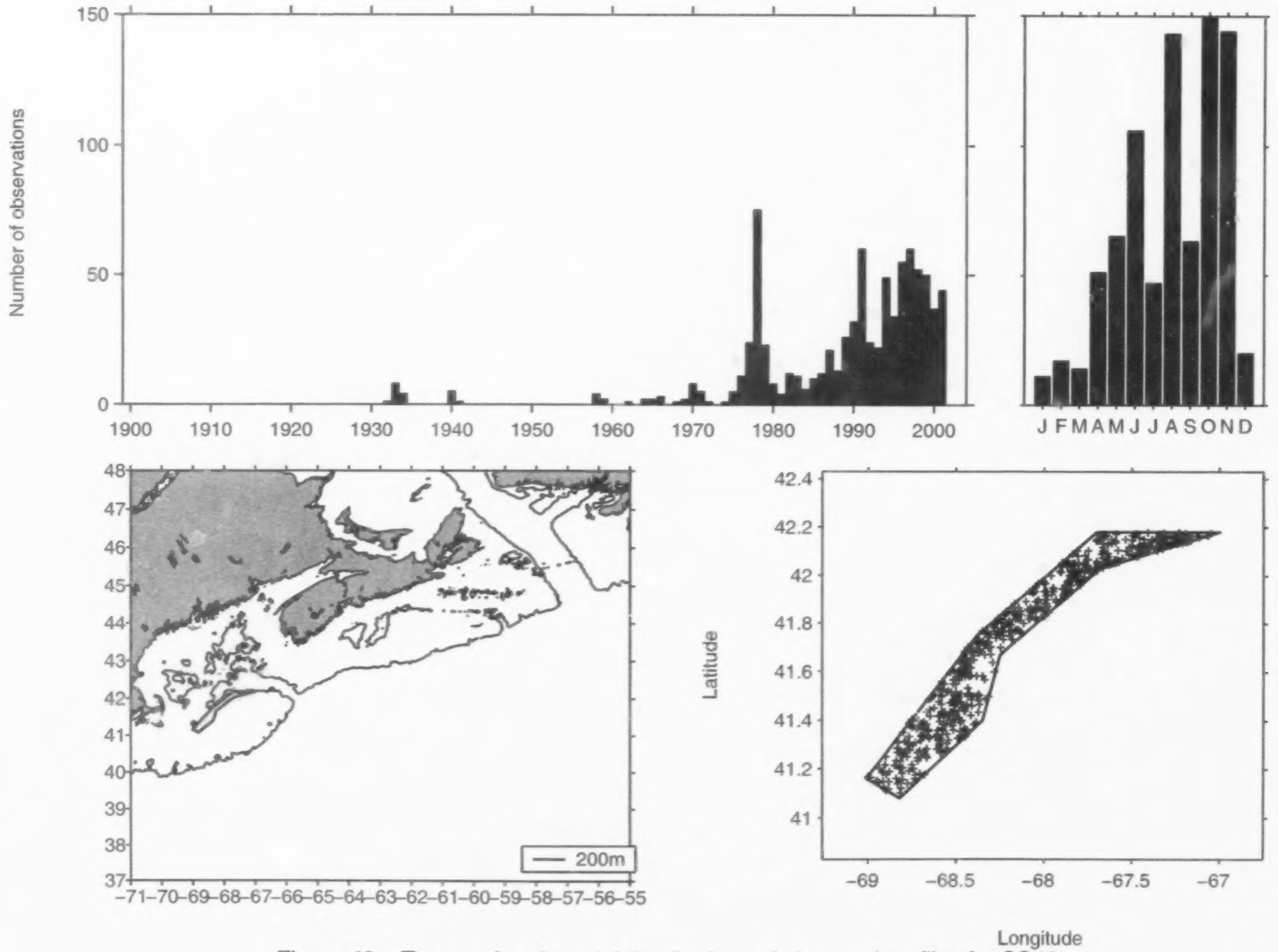

Figure 43a. Temporal and spatial distributions of observed profiles for SS40.

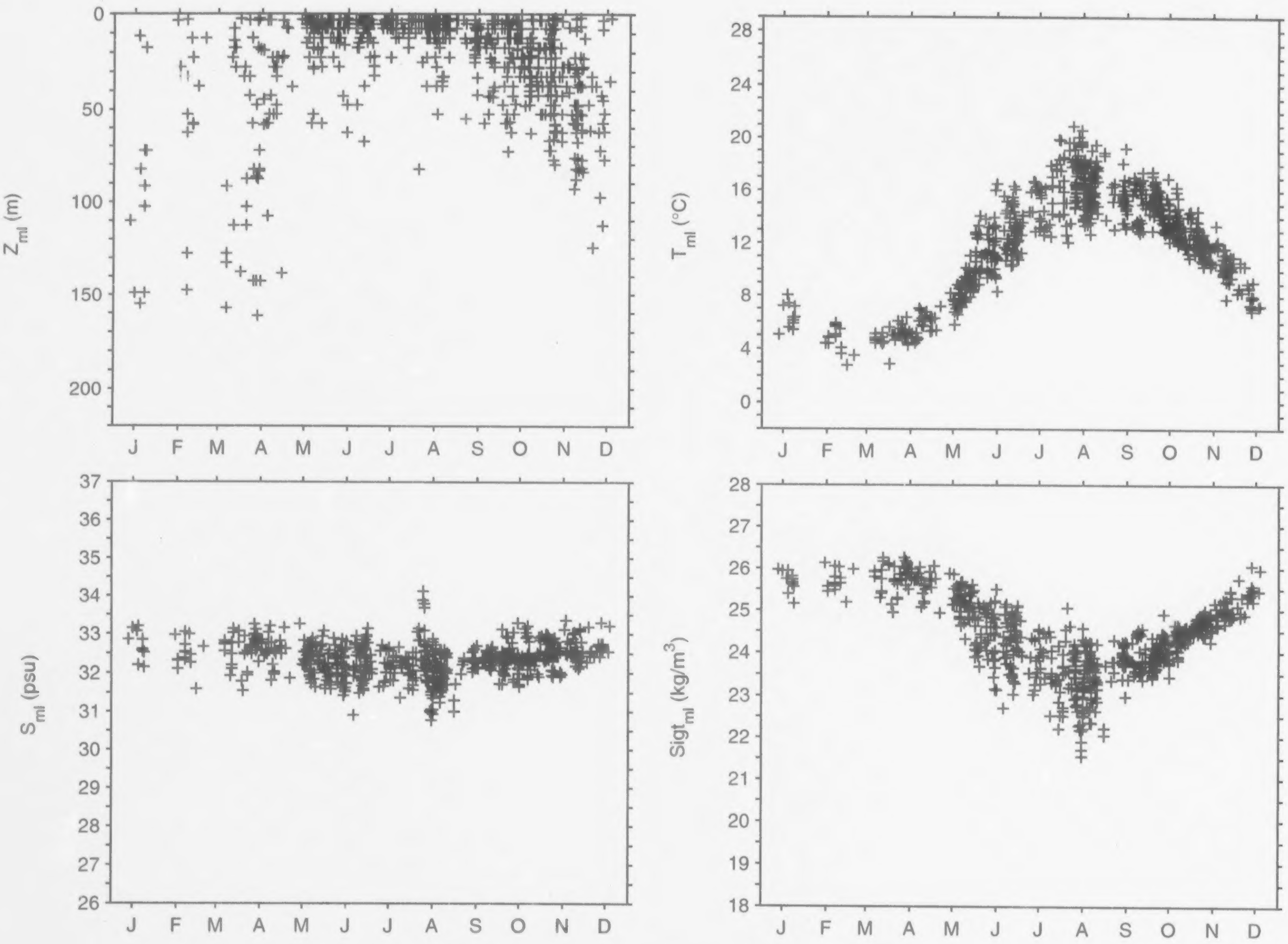

Figure 43b. Calculated mixed layer characteristics for SS40.

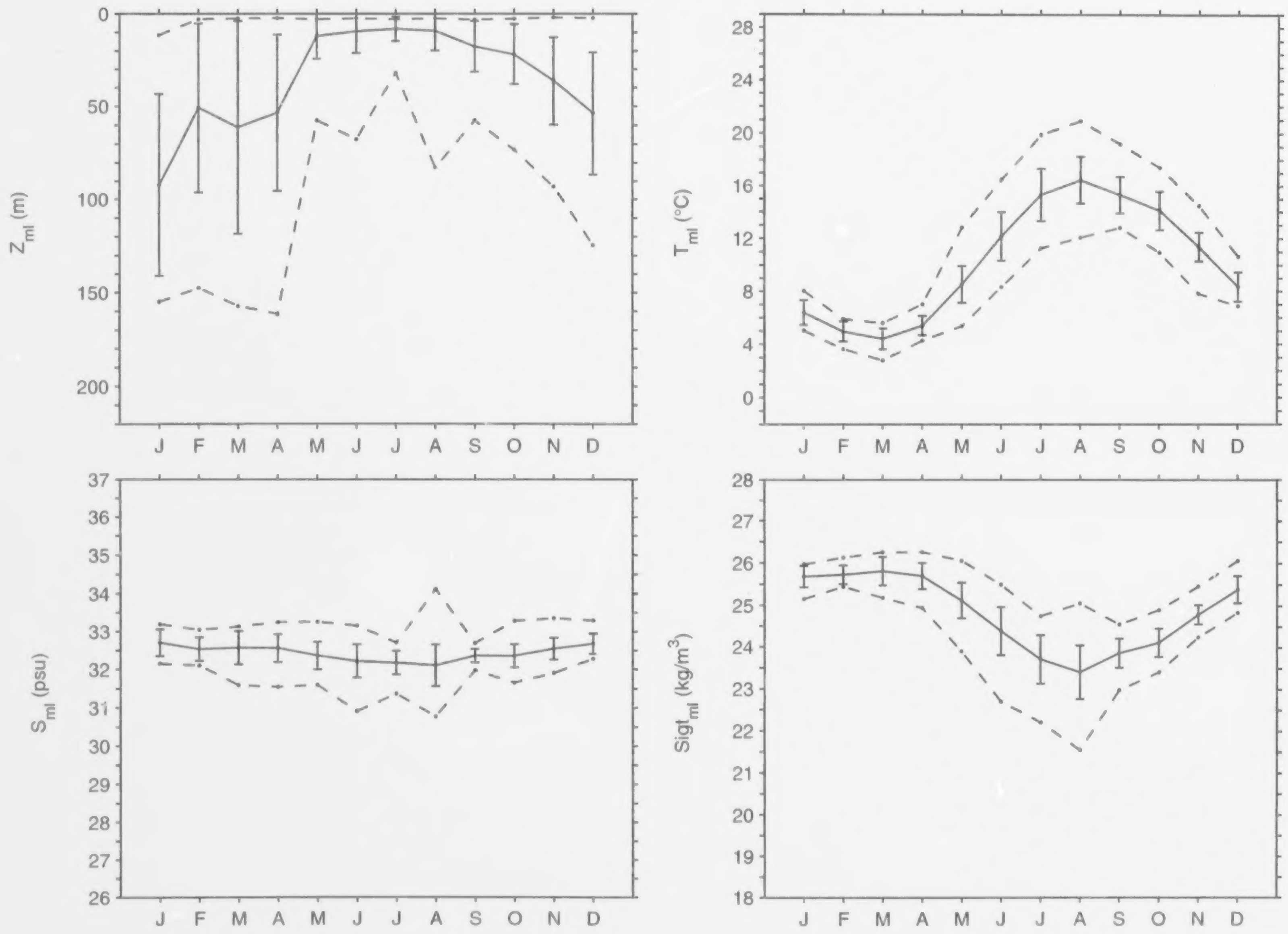

Figure 43c. Monthly statistics of mixed layer characteristics for SS40 (– : mean±sd; –– : min,max).

Table 41. Monthly statistics of mixed layer characteristics for SS40.

Profiles extracted (#) : 1219 Profiles retained (#) : 831 Profiles rejected (%) : 31.8
Mean seabed depth (m) for subregion : 89.7 Mean sounding depth (m) for profiles : 105.2

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	11	16	15	51	65	105	47	144	62	147	148	20
Mixed layer depth : Z_ml (m)												
mean	92.14	50.75	61.17	53.35	12.01	9.50	8.12	9.20	17.55	21.86	36.19	53.58
median	91.50	32.50	27.60	44.50	7.50	5.50	7.50	7.50	12.75	17.50	36.77	49.83
min	11.50	3.00	2.50	2.35	3.00	2.50	3.00	2.50	3.25	2.70	2.00	2.25
max	155.00	147.50	157.25	161.50	57.50	67.50	32.05	82.50	57.50	73.00	93.00	124.50
s.d.	48.77	45.58	57.34	42.11	12.29	11.61	6.53	10.54	13.75	16.22	23.61	32.77
Mixed layer temperature : T_ml (deg.C)												
mean	6.39	4.97	4.42	5.42	8.55	12.19	15.35	16.48	15.33	14.13	11.40	8.36
median	6.31	4.97	4.54	5.21	8.56	12.14	15.69	16.34	15.53	14.24	11.54	8.18
min	5.04	3.64	2.79	4.28	5.37	8.34	11.29	12.10	12.83	10.97	7.82	6.89
max	8.03	5.90	5.60	7.03	12.82	16.50	19.91	20.93	19.23	17.44	14.49	10.66
s.d.	0.94	0.75	0.79	0.73	1.40	1.82	2.01	1.81	1.40	1.46	1.08	1.12
Mixed layer salinity : S_ml (psu)												
mean	32.70	32.54	32.58	32.57	32.37	32.23	32.18	32.11	32.37	32.36	32.55	32.68
median	32.60	32.43	32.74	32.60	32.34	32.19	32.20	32.09	32.36	32.36	32.51	32.62
min	32.15	32.11	31.59	31.55	31.60	30.92	31.37	30.78	31.98	31.66	31.91	32.28
max	33.20	33.05	33.14	33.25	33.26	33.16	32.71	34.13	32.70	33.29	33.36	33.30
s.d.	0.36	0.31	0.44	0.36	0.36	0.44	0.31	0.55	0.18	0.30	0.29	0.27
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.68	25.73	25.81	25.70	25.12	24.39	23.71	23.41	23.86	24.11	24.79	25.39
median	25.73	25.64	25.92	25.73	25.13	24.45	23.82	23.51	23.79	24.10	24.79	25.40
min	25.15	25.44	25.18	24.94	23.89	22.70	22.21	21.55	22.97	23.41	24.24	24.84
max	25.97	26.13	26.26	26.26	26.06	25.50	24.75	25.06	24.55	24.90	25.47	26.06
s.d.	0.25	0.22	0.33	0.30	0.42	0.58	0.58	0.64	0.35	0.34	0.23	0.32

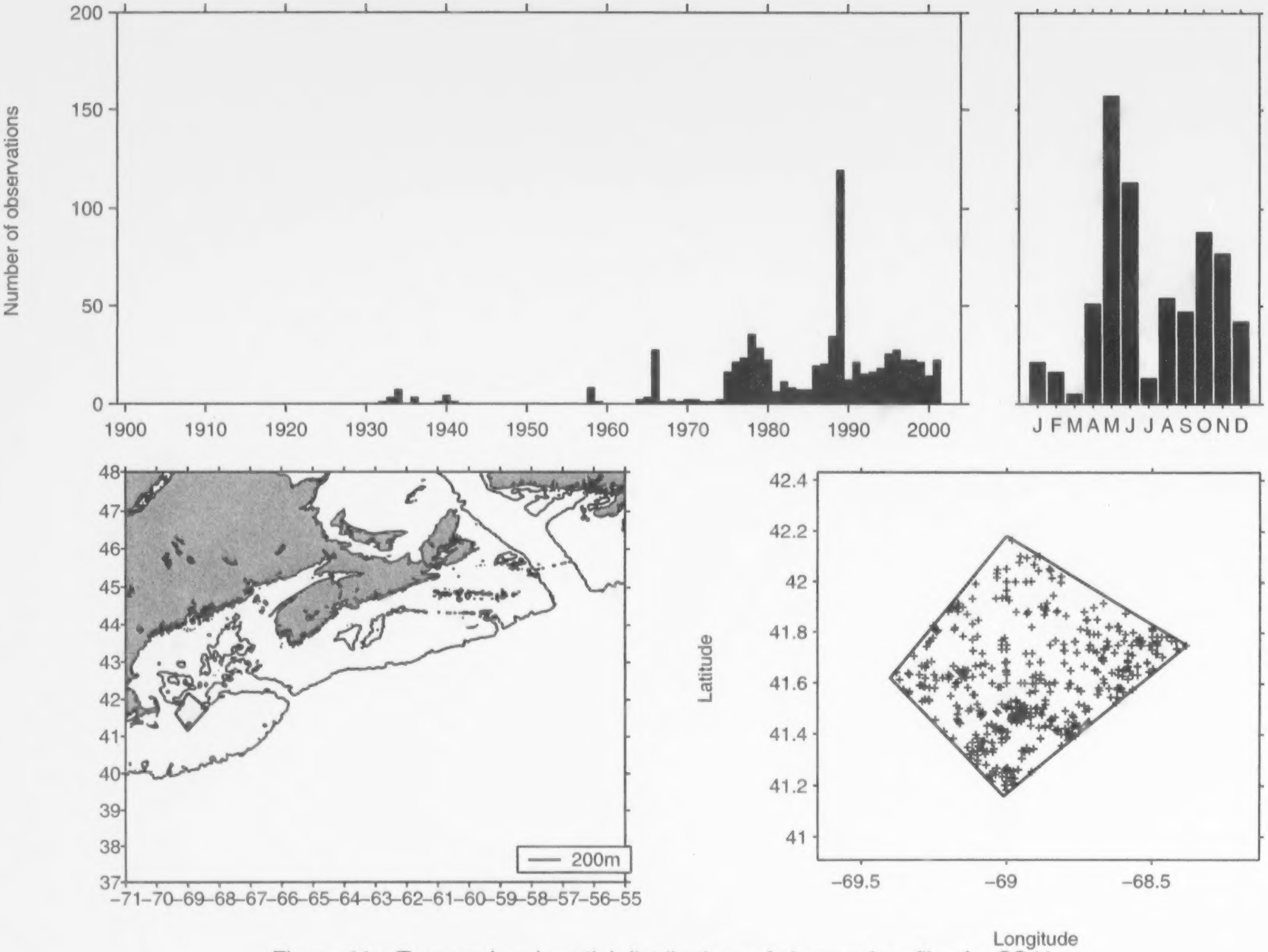

Figure 44a. Temporal and spatial distributions of observed profiles for SS41.

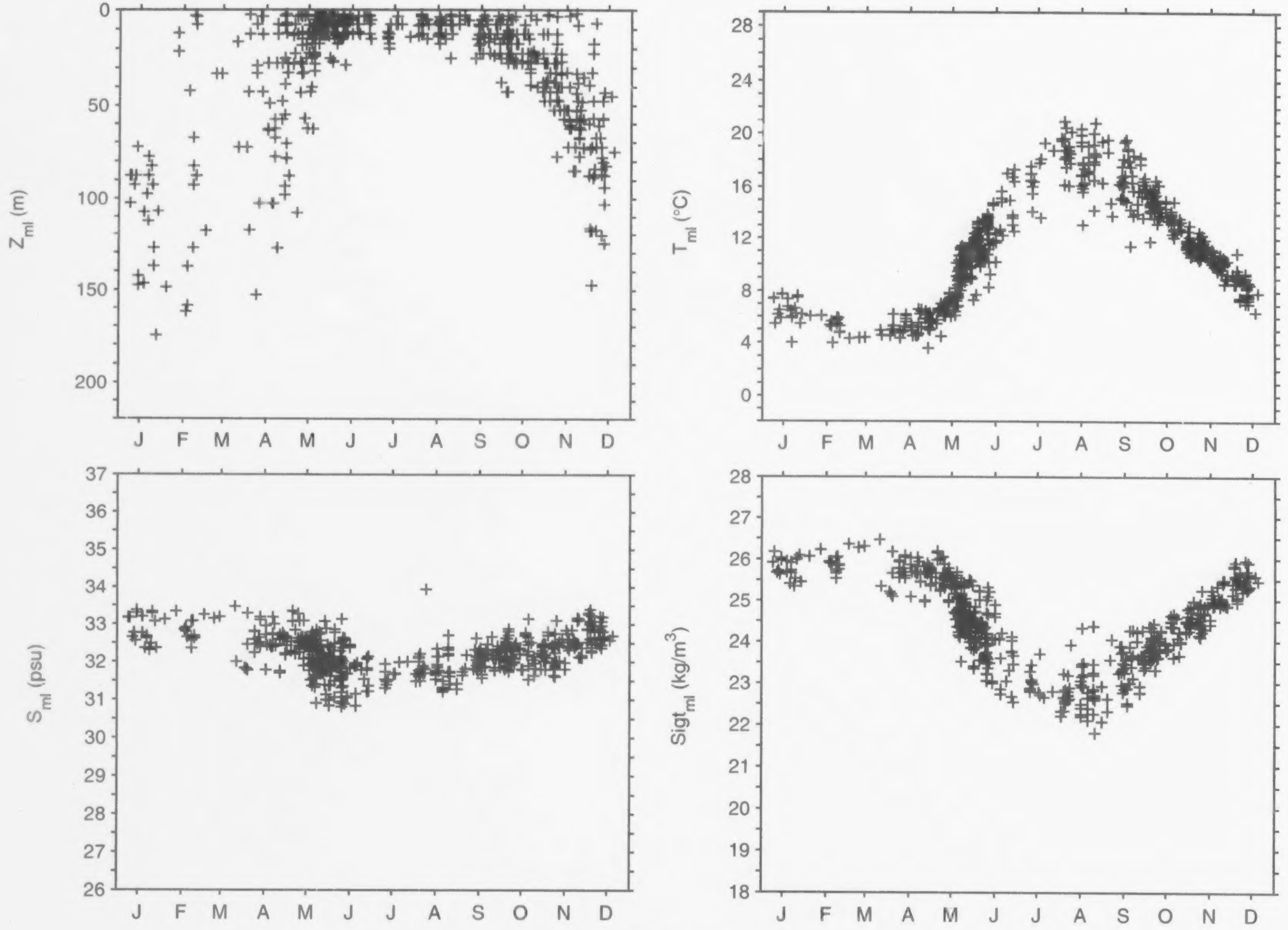

Figure 44b. Calculated mixed layer characteristics for SS41.

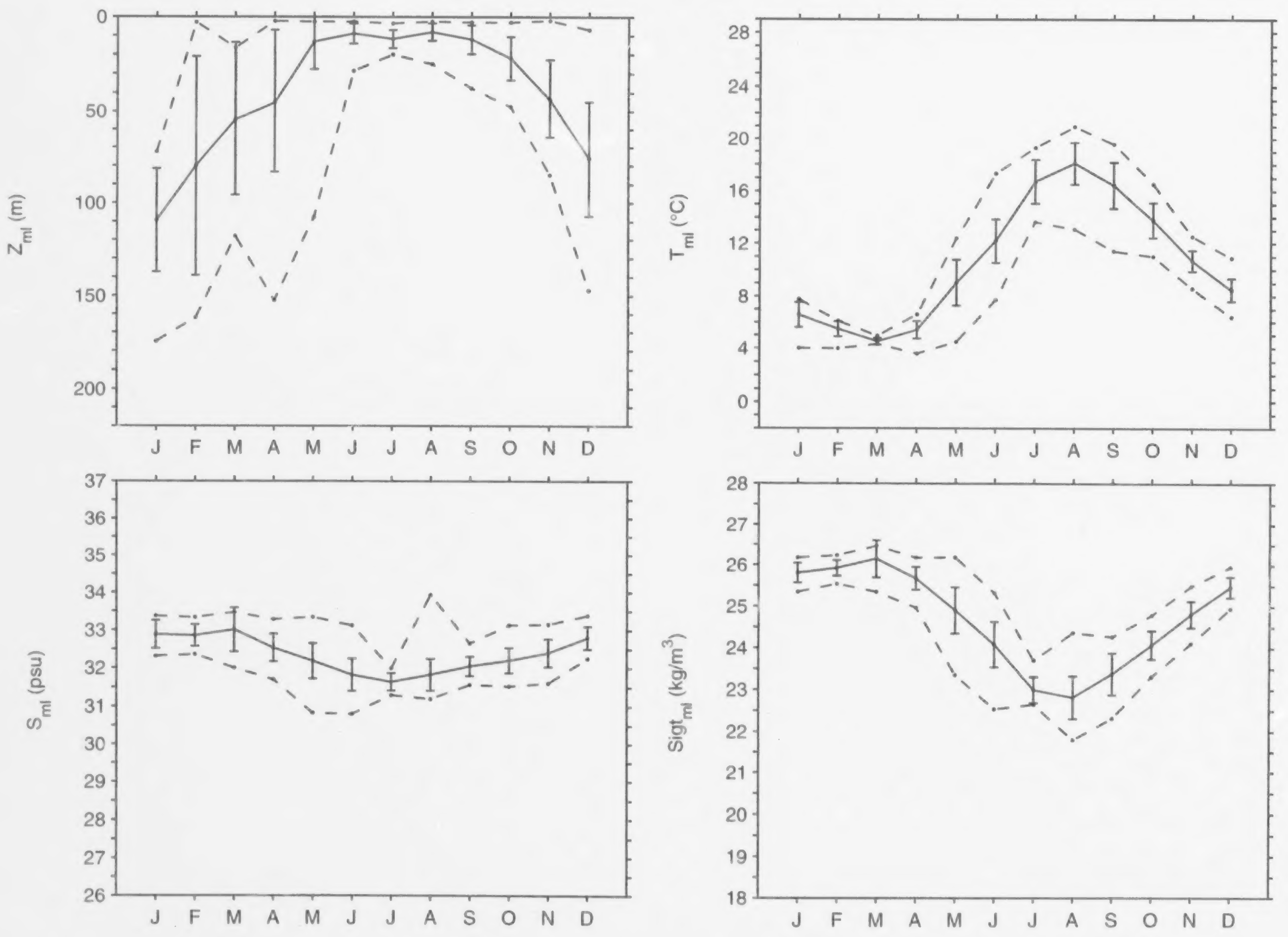

Figure 44c. Monthly statistics of mixed layer characteristics for SS41 (– : mean±sd; –– : min,max).

Table 42. Monthly statistics of mixed layer characteristics for SS41.

Profiles extracted (#) : 932 Profiles retained (#) : 684 Profiles rejected (%) : 26.6
Mean seabed depth (m) for subregion : 159.8 Mean sounding depth (m) for profiles : 161.3

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	21	16	5	51	153	117	13	54	47	85	80	42
Mixed layer depth : Z_ml (m)												
mean	109.44	80.06	54.60	45.25	13.18	8.90	11.77	8.09	12.04	21.95	43.52	75.98
median	102.50	85.00	33.00	38.50	8.00	7.50	12.50	7.50	12.50	22.50	45.25	74.25
min	72.50	3.00	16.50	2.25	2.65	2.50	3.50	2.50	2.90	3.00	2.00	6.90
max	175.00	162.00	118.00	152.50	107.75	28.50	20.00	25.00	37.50	47.50	85.00	147.00
s.d.	27.80	59.05	41.00	38.15	14.46	5.37	4.77	4.58	7.59	11.35	20.77	31.13
Mixed layer temperature : T_ml (deg.C)												
mean	6.57	5.47	4.51	5.40	9.02	12.18	16.72	18.10	16.43	13.77	10.68	8.49
median	6.52	5.53	4.39	5.27	9.41	11.93	16.52	18.34	16.36	14.09	10.62	8.64
min	4.00	3.98	4.31	3.59	4.48	7.72	13.64	13.08	11.40	11.00	8.59	6.41
max	7.76	6.09	4.93	6.60	12.38	17.32	19.29	20.95	19.57	16.52	12.53	10.89
s.d.	0.97	0.58	0.26	0.68	1.73	1.66	1.66	1.59	1.75	1.34	0.78	0.87
Mixed layer salinity : S_ml (psu)												
mean	32.89	32.86	33.01	32.54	32.19	31.83	31.65	31.84	32.06	32.21	32.41	32.81
median	32.77	32.83	33.19	32.61	32.25	31.87	31.67	31.75	32.06	32.19	32.44	32.81
min	32.31	32.36	32.01	31.70	30.84	30.81	31.30	31.20	31.57	31.53	31.61	32.26
max	33.37	33.34	33.47	33.29	33.35	33.13	32.01	33.94	32.67	33.14	33.16	33.39
s.d.	0.37	0.29	0.58	0.36	0.47	0.42	0.23	0.42	0.26	0.33	0.37	0.30
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.81	25.93	26.15	25.68	24.90	24.08	22.99	22.82	23.38	24.07	24.81	25.48
median	25.92	25.93	26.31	25.69	24.86	24.12	22.87	22.78	23.45	24.03	24.86	25.47
min	25.34	25.54	25.35	24.96	23.34	22.54	22.65	21.80	22.32	23.31	24.11	24.95
max	26.18	26.23	26.47	26.18	26.19	25.32	23.70	24.37	24.27	24.79	25.49	25.96
s.d.	0.24	0.19	0.46	0.28	0.56	0.54	0.31	0.50	0.50	0.34	0.32	0.25

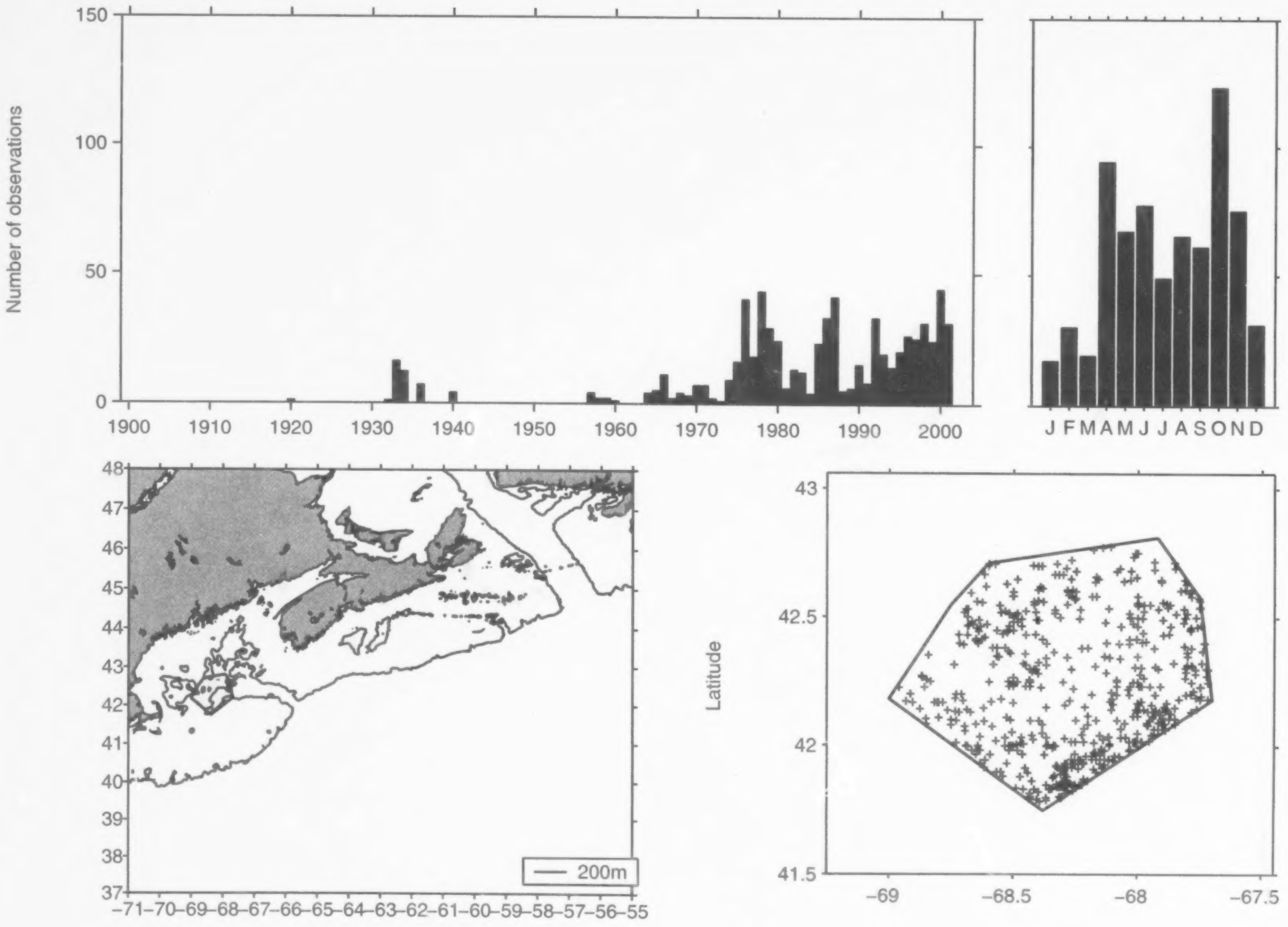

Figure 45a. Temporal and spatial distributions of observed profiles for SS42.

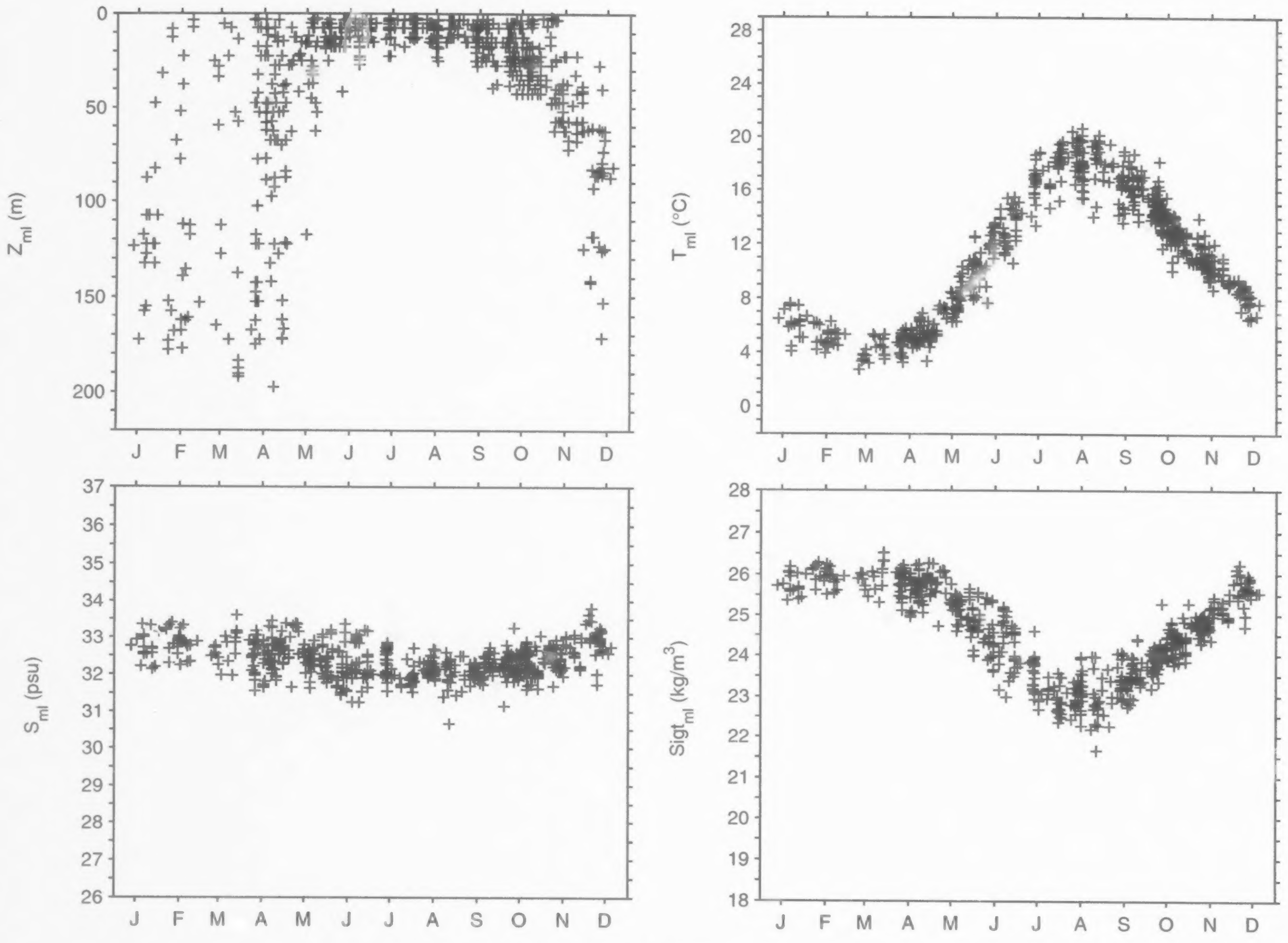

Figure 45b. Calculated mixed layer characteristics for SS42.

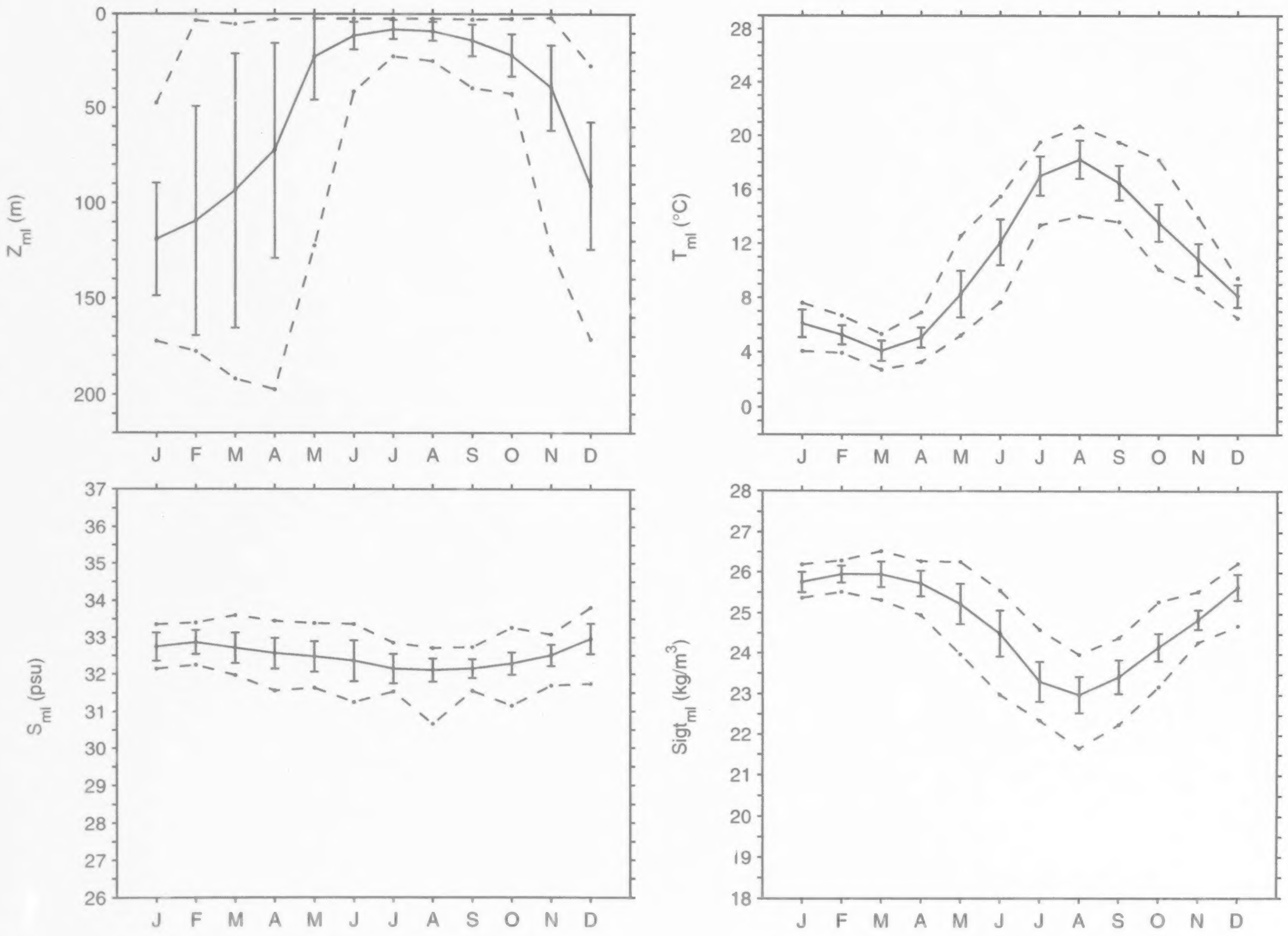

Figure 45c. Monthly statistics of mixed layer characteristics for SS42 (– : mean±sd; –– : min,max).

Table 43. Monthly statistics of mixed layer characteristics for SS42.

Profiles extracted (#) : 836 Profiles retained (#) : 708 Profiles rejected (%) : 15.3
Mean seabed depth (m) for subregion : 190.4 Mean sounding depth (m) for profiles : 188.6

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	17	30	19	94	64	80	47	67	61	123	75	31
Mixed layer depth : Z_ml (m)												
mean	119.18	109.42	93.34	72.26	22.66	11.52	8.20	9.16	13.94	21.92	39.17	90.94
median	122.50	137.25	59.50	52.50	15.00	11.88	7.50	7.50	12.50	22.50	41.00	84.50
min	47.50	3.50	5.50	3.00	2.50	2.50	2.50	2.50	3.00	2.50	2.00	27.50
max	172.50	177.80	192.00	197.50	122.50	41.50	22.50	25.00	39.50	42.50	125.00	171.50
s.d.	29.55	60.16	72.32	56.83	23.10	7.26	4.99	5.02	8.35	11.28	22.71	33.47
Mixed layer temperature : T_ml (deg.C)												
mean	6.09	5.26	4.10	5.08	8.27	12.11	17.02	18.24	16.50	13.56	10.83	8.14
median	6.11	5.32	3.86	5.02	8.03	12.06	16.91	18.21	16.47	13.30	10.75	8.21
min	4.06	3.95	2.73	3.26	5.23	7.68	13.38	14.04	13.62	10.09	8.71	6.50
max	7.61	6.68	5.32	6.91	12.58	15.51	19.52	20.69	19.50	18.19	13.94	9.46
s.d.	1.01	0.70	0.74	0.74	1.71	1.70	1.44	1.42	1.27	1.38	1.17	0.84
Mixed layer salinity : S_ml (psu)												
mean	32.74	32.87	32.71	32.56	32.47	32.36	32.14	32.10	32.14	32.28	32.5[illegible]	32.96
median	32.71	32.90	32.72	32.64	32.45	32.26	32.00	32.12	32.13	32.28	32.53	32.99
min	32.14	32.25	31.97	31.56	31.63	31.25	31.53	30.66	31.54	31.15	31.69	31.74
max	33.36	33.40	33.61	33.45	33.38	33.36	32.85	32.70	32.72	33.26	33.08	33.81
s.d.	0.38	0.33	0.42	0.42	0.42	0.56	0.39	0.31	0.25	0.30	0.29	0.42
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.75	25.95	25.95	25.73	25.23	24.50	23.31	22.99	23.43	24.17	24.86	25.65
median	25.70	25.97	25.99	25.78	25.30	24.56	23.25	23.01	23.41	24.10	24.82	25.63
min	25.37	25.52	25.32	24.96	23.98	22.99	22.36	21.66	22.26	23.19	24.29	24.70
max	26.19	26.29	26.53	26.28	26.26	25.56	24.60	23.98	24.40	25.29	25.54	26.23
s.d.	0.25	0.21	0.31	0.31	0.49	0.57	0.49	0.45	0.41	0.34	0.24	0.31

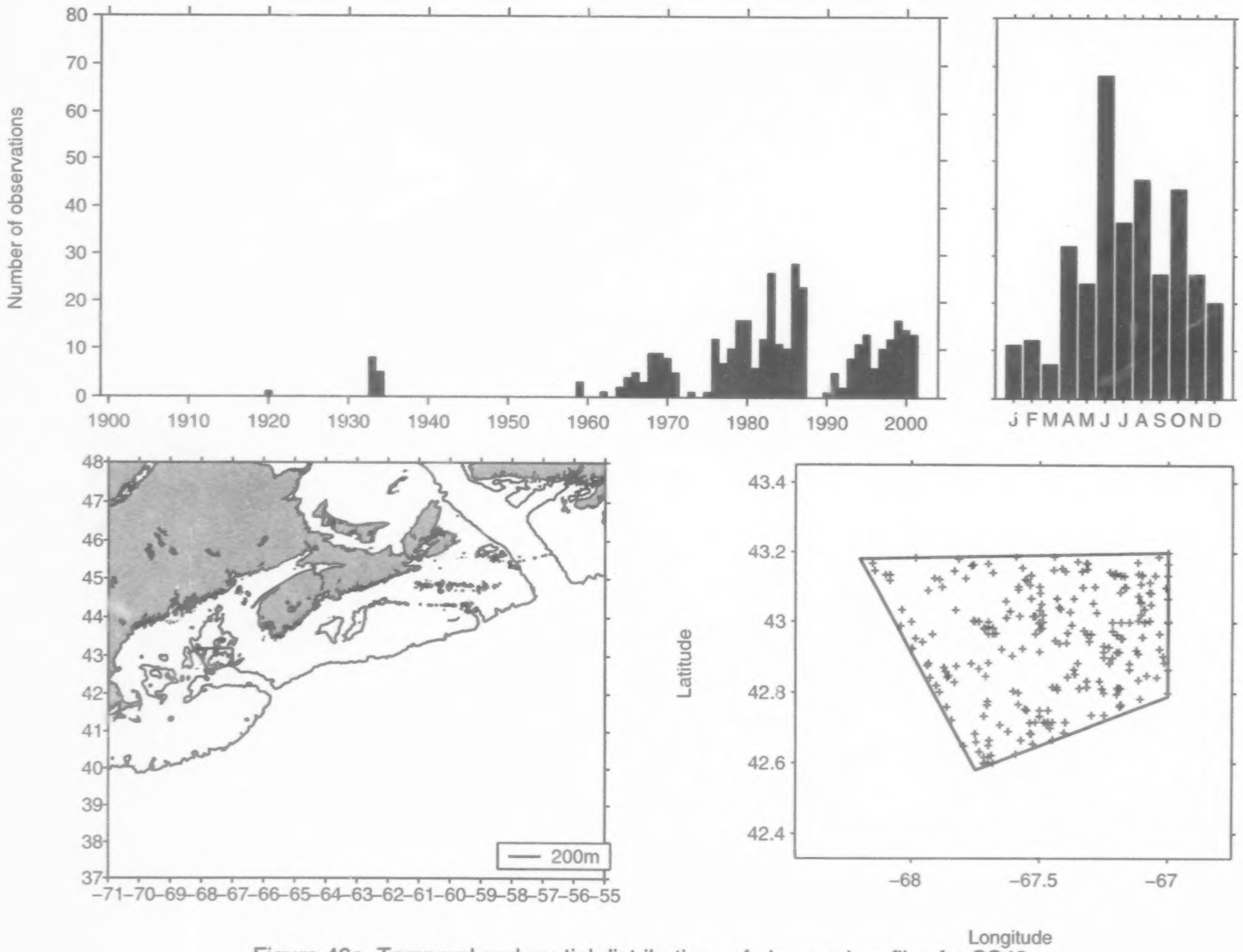

Figure 46a. Temporal and spatial distributions of observed profiles for SS43.

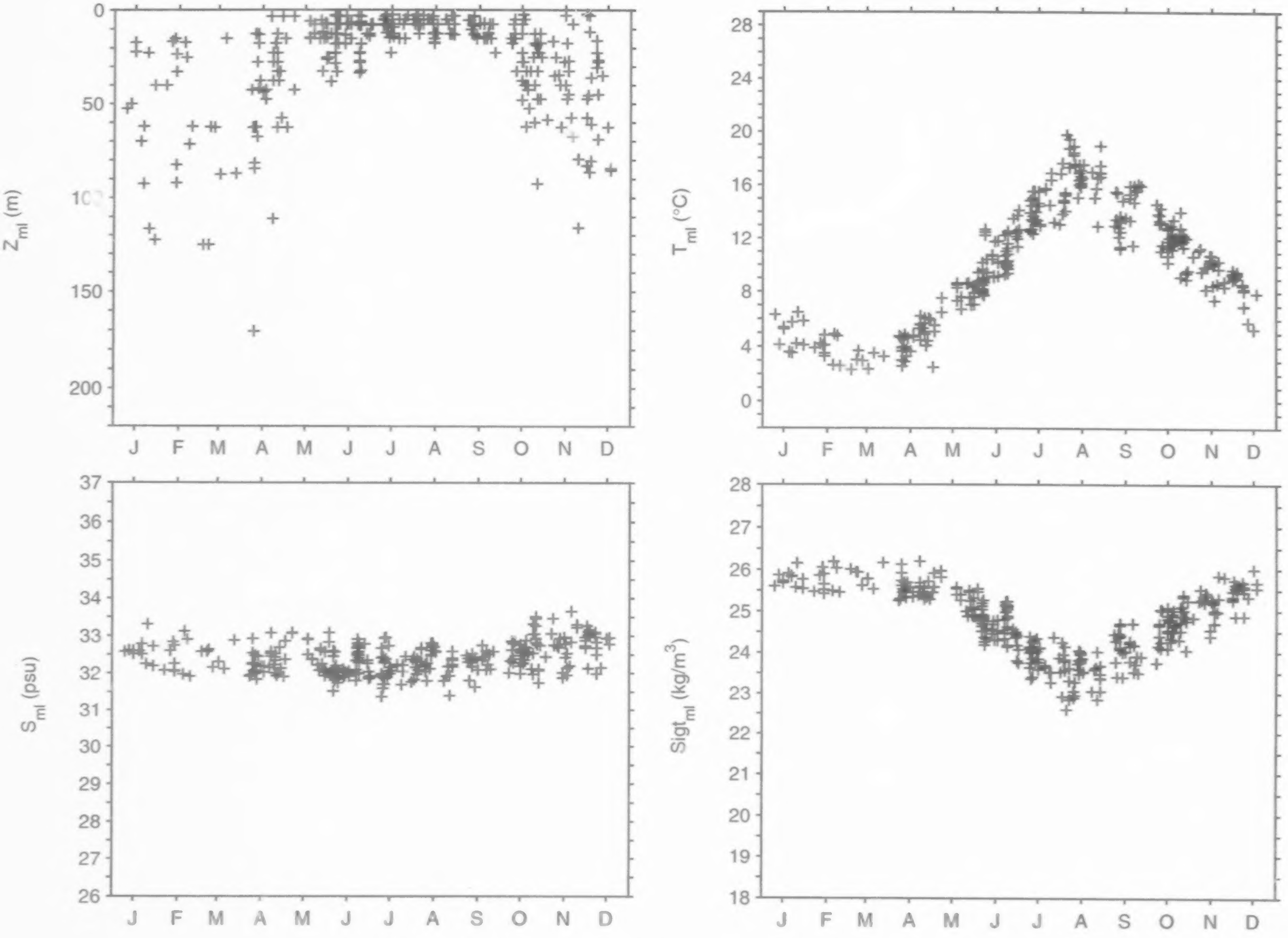

Figure 46b. Calculated mixed layer characteristics for SS43.

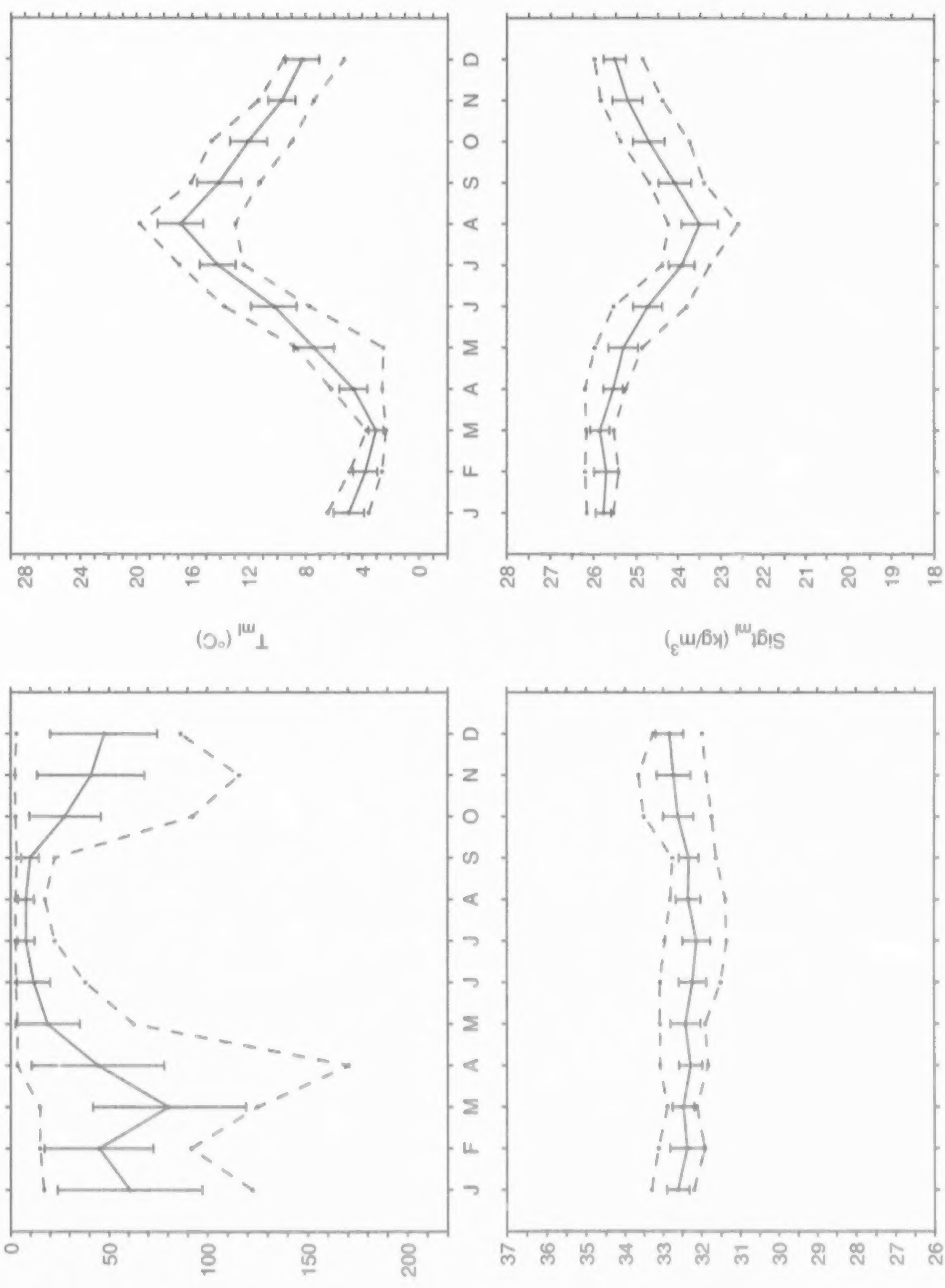

Figure 46c. Monthly statistics of mixed layer characteristics for SS43 (– : mean±sd; -- : min,max).

Table 44. Monthly statistics of mixed layer characteristics for SS43.

Profiles extracted (#) : 392 Profiles retained (#) : 353 Profiles rejected (%) : 9.9
Mean seabed depth (m) for subregion : 201.4 Mean sounding depth (m) for profiles : 201.7

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	11	12	7	32	24	68	37	46	26	44	26	20
Mixed layer depth : Z_ml (m)												
mean	60.68	44.95	80.59	44.53	18.92	11.71	7.77	7.75	9.82	27.65	40.78	47.45
median	52.50	36.33	87.00	37.50	14.75	7.70	7.50	7.50	7.88	22.50	37.50	40.50
min	17.00	15.00	14.90	3.50	3.50	2.75	2.50	2.50	3.25	2.50	2.25	3.00
max	122.50	92.00	125.00	170.50	62.50	38.00	22.50	17.50	22.50	92.50	116.00	86.50
s.d.	36.75	27.70	38.76	33.80	16.38	8.49	4.31	4.08	4.51	18.18	27.32	27.26
Mixed layer temperature : T_ml (deg.C)												
mean	4.97	3.80	3.04	4.64	7.43	10.25	14.21	16.85	14.11	12.04	9.69	8.24
median	5.26	4.00	3.05	4.69	7.62	10.01	14.17	16.93	14.25	12.08	9.80	8.55
min	3.56	2.62	2.34	2.60	2.52	7.74	12.38	12.96	11.26	8.97	7.44	5.30
max	6.46	4.91	3.72	6.22	8.67	13.76	16.93	19.79	16.10	14.63	11.31	9.53
s.d.	1.07	0.86	0.54	0.99	1.42	1.61	1.28	1.62	1.56	1.30	0.96	1.19
Mixed layer salinity : S_ml (psu)												
mean	32.61	32.37	32.47	32.28	32.41	32.23	32.13	32.35	32.33	32.61	32.73	32.83
median	32.59	32.17	32.58	32.23	32.37	32.10	32.06	32.31	32.36	32.64	32.75	32.96
min	32.20	31.91	32.12	31.83	31.90	31.51	31.36	31.39	31.62	31.74	31.88	31.98
max	33.31	33.12	32.88	33.08	33.08	33.08	32.96	32.81	32.75	33.51	33.65	33.27
s.d.	0.29	0.44	0.28	0.30	0.39	0.35	0.36	0.32	0.25	0.40	0.45	0.37
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.77	25.71	25.86	25.55	25.31	24.74	23.92	23.50	24.09	24.72	25.22	25.53
median	25.77	25.58	25.94	25.55	25.36	24.77	24.04	23.58	24.13	24.78	25.27	25.55
min	25.54	25.42	25.54	25.26	24.87	23.80	23.27	22.59	23.39	23.75	24.39	24.87
max	26.16	26.20	26.17	26.21	25.98	25.54	24.39	24.24	24.70	25.39	25.85	26.00
s.d.	0.18	0.28	0.22	0.23	0.35	0.35	0.31	0.43	0.39	0.38	0.35	0.26

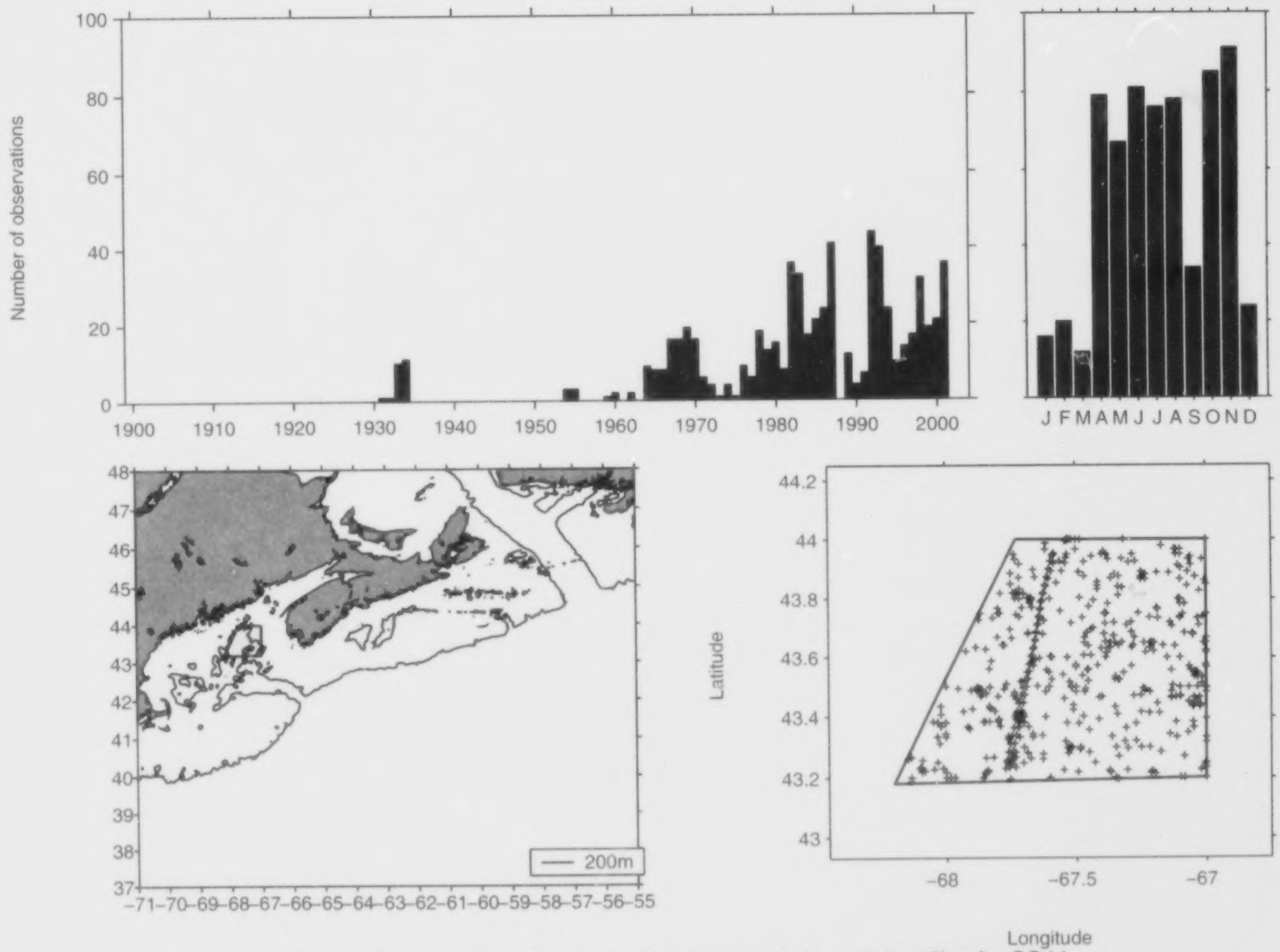

Figure 47a. Temporal and spatial distributions of observed profiles for SS44.

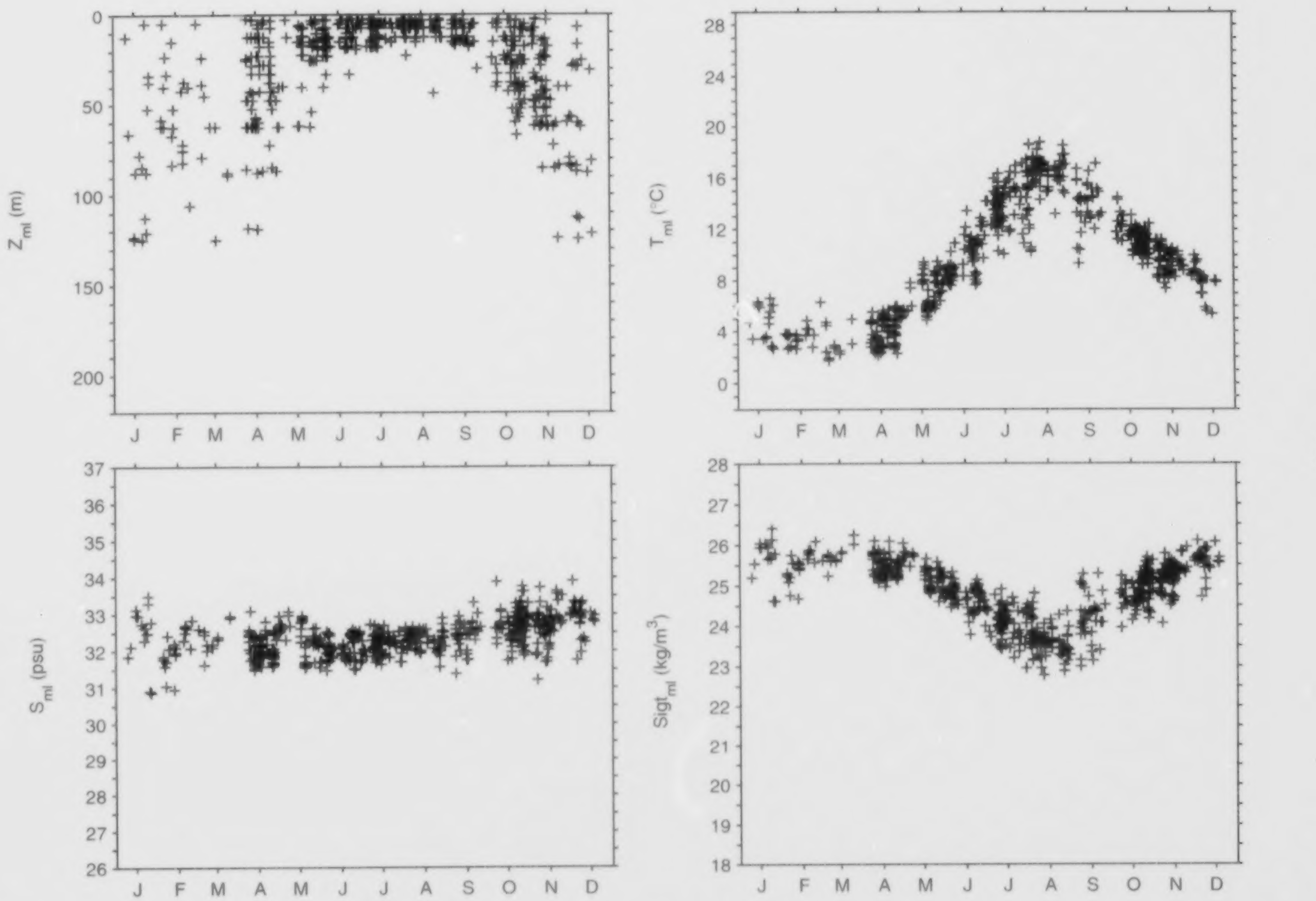

Figure 47b. Calculated mixed layer characteristics for SS44.

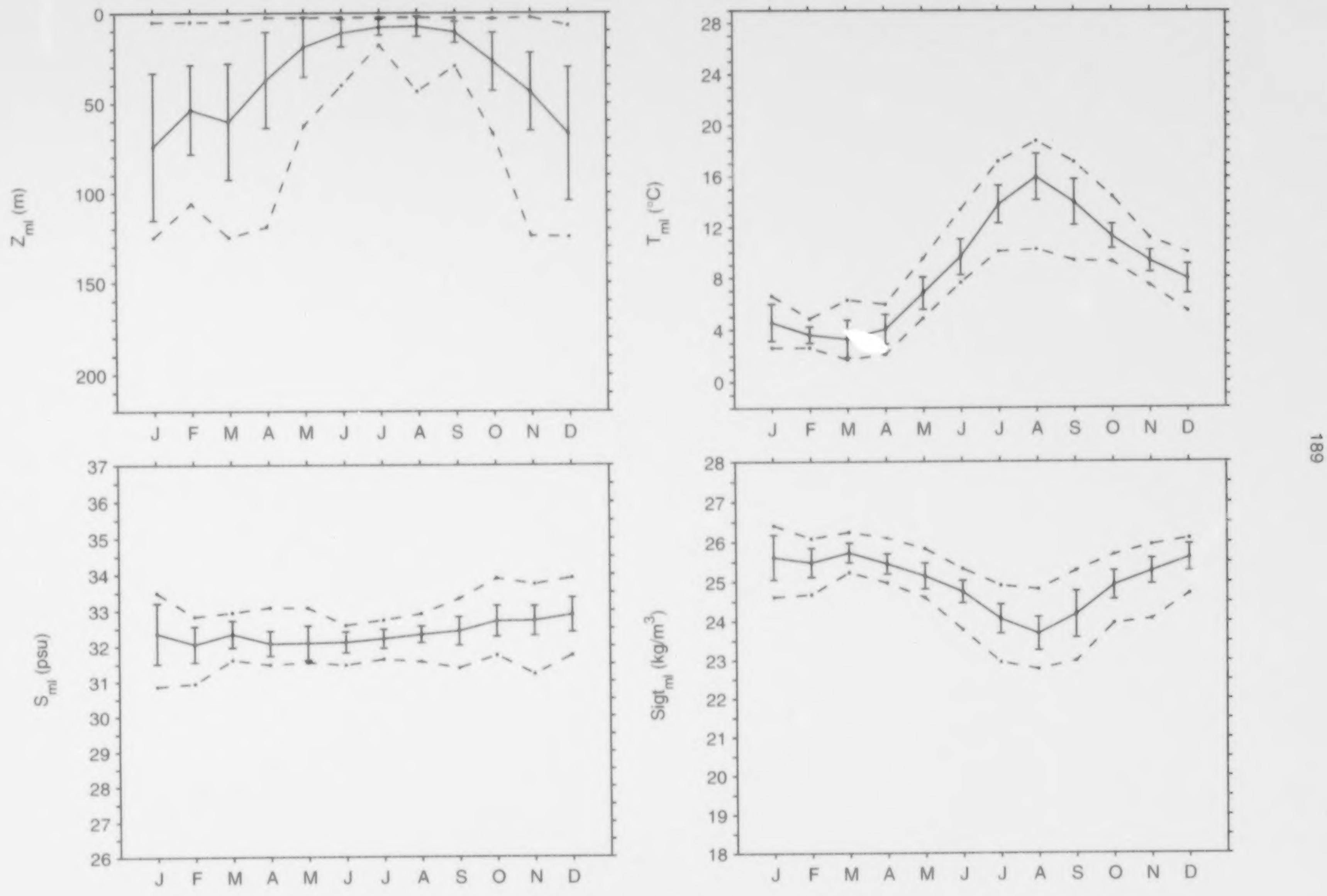

Figure 47c. Monthly statistics of mixed layer characteristics for SS44 (– : mean±sd; -- : min,max).

Table 45. Monthly statistics of mixed layer characteristics for SS44.

Profiles extracted (#) : 773 Profiles retained (#) : 663 Profiles rejected (%) : 14.2
Mean seabed depth (m) for subregion : 208.0 Mean sounding depth (m) for profiles : 210.6

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	16	20	12	79	67	80	77	78	34	85	91	24
Mixed layer depth : Z_ml (m)												
mean	74.33	53.64	60.42	37.27	19.04	11.23	7.91	7.57	10.67	27.07	43.79	67.19
median	81.25	55.50	62.50	32.50	15.00	12.27	7.00	7.50	12.25	27.50	47.10	71.00
min	5.00	5.00	5.00	2.50	2.75	2.50	2.50	2.50	2.90	3.25	2.50	7.00
max	125.00	106.00	125.00	119.00	62.50	40.00	17.90	43.50	29.50	67.00	124.00	124.50
s.d.	40.96	24.81	32.29	26.69	16.56	7.66	4.42	5.53	5.85	16.05	21.60	36.92
Mixed layer temperature : T_ml (deg.C)												
mean	4.58	3.63	3.32	4.07	6.81	9.65	13.84	15.99	14.02	11.32	9.31	7.90
median	4.67	3.70	2.81	4.25	6.21	9.18	13.94	16.47	14.36	11.41	8.84	7.99
min	2.64	2.65	1.74	2.14	4.89	7.63	10.08	10.26	9.35	9.26	7.40	5.40
max	6.62	4.87	6.30	[illegible].97	9.49	13.42	17.20	18.80	17.18	14.50	11.19	10.00
s.d.	1.42	0.63	1.43	1.13	1.24	1.44	1.48	1.81	1.81	0.97	0.88	1.15
Mixed layer salinity : S_ml (psu)												
mean	32.36	32.06	32.35	32.08	32.10	32.12	32.21	32.33	32.42	32.70	32.71	32.88
median	32.56	32.08	32.35	32.05	32.17	32.11	32.23	32.34	32.46	32.70	32.79	32.99
min	30.87	30.95	31.62	31.48	31.55	31.47	31.64	31.57	31.38	31.74	31.21	31.75
max	33.50	32.84	32.95	33.09	33.08	32.59	32.74	32.91	33.33	33.90	33.73	33.91
s.d.	0.85	0.50	0.38	0.35	0.49	0.29	0.26	0.23	0.40	0.43	0.41	0.48
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.62	25.48	25.73	25.45	25.15	24.75	24.06	23.69	24.18	24.93	25.28	25.62
median	25.75	25.54	25.71	25.41	25.07	24.83	24.06	23.63	24.16	25.03	25.35	25.66
min	24.61	24.68	25.24	24.97	24.60	23.78	22.95	22.77	22.99	23.95	24.06	24.71
max	26.42	26.09	26.25	26.10	25.83	25.33	24.91	24.81	25.29	25.69	25.94	26.10
s.d.	0.56	0.36	0.25	0.25	0.33	0.28	0.37	0.42	0.59	0.36	0.32	0.33

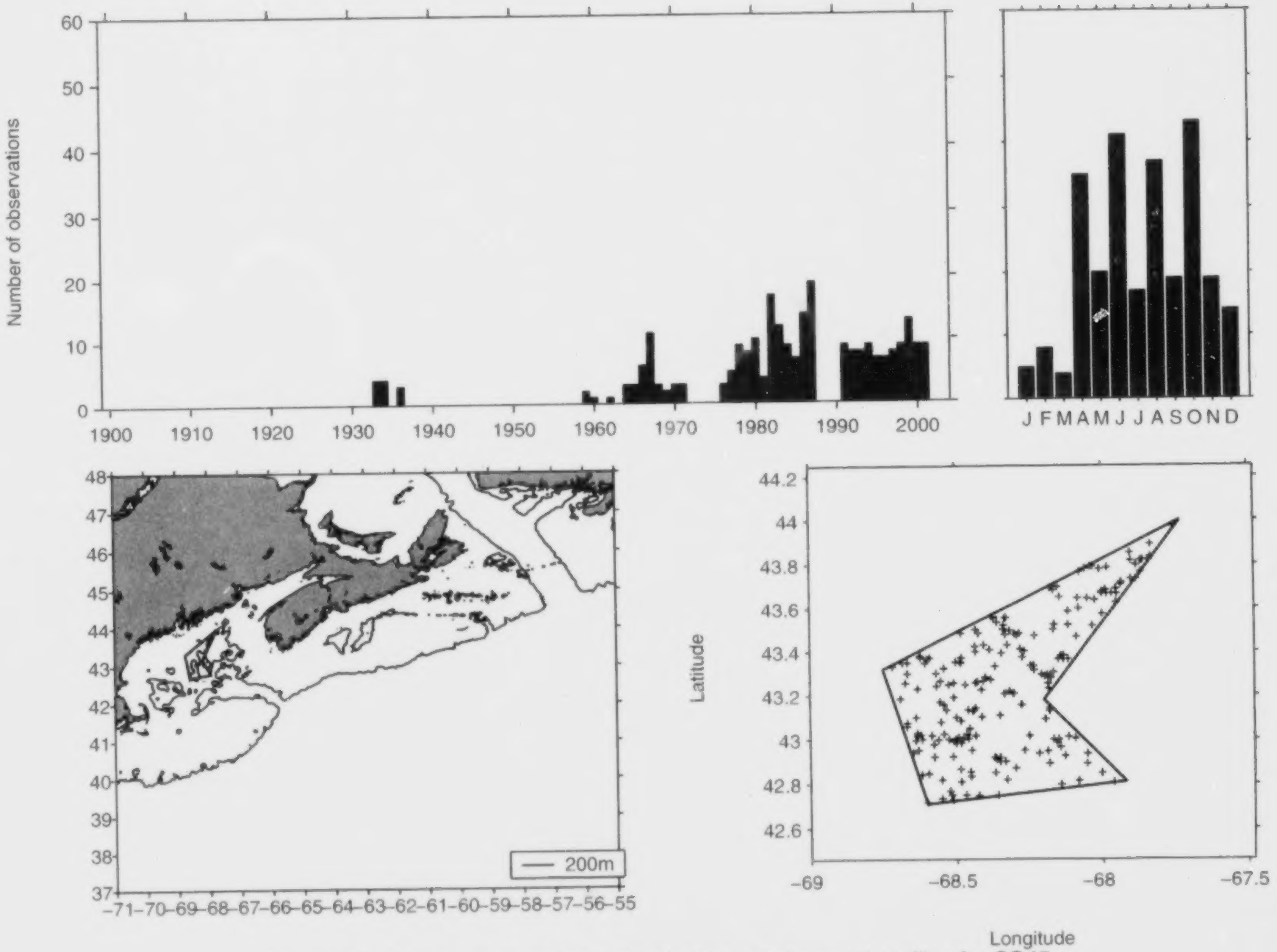

Figure 48a. Temporal and spatial distributions of observed profiles for SS45.

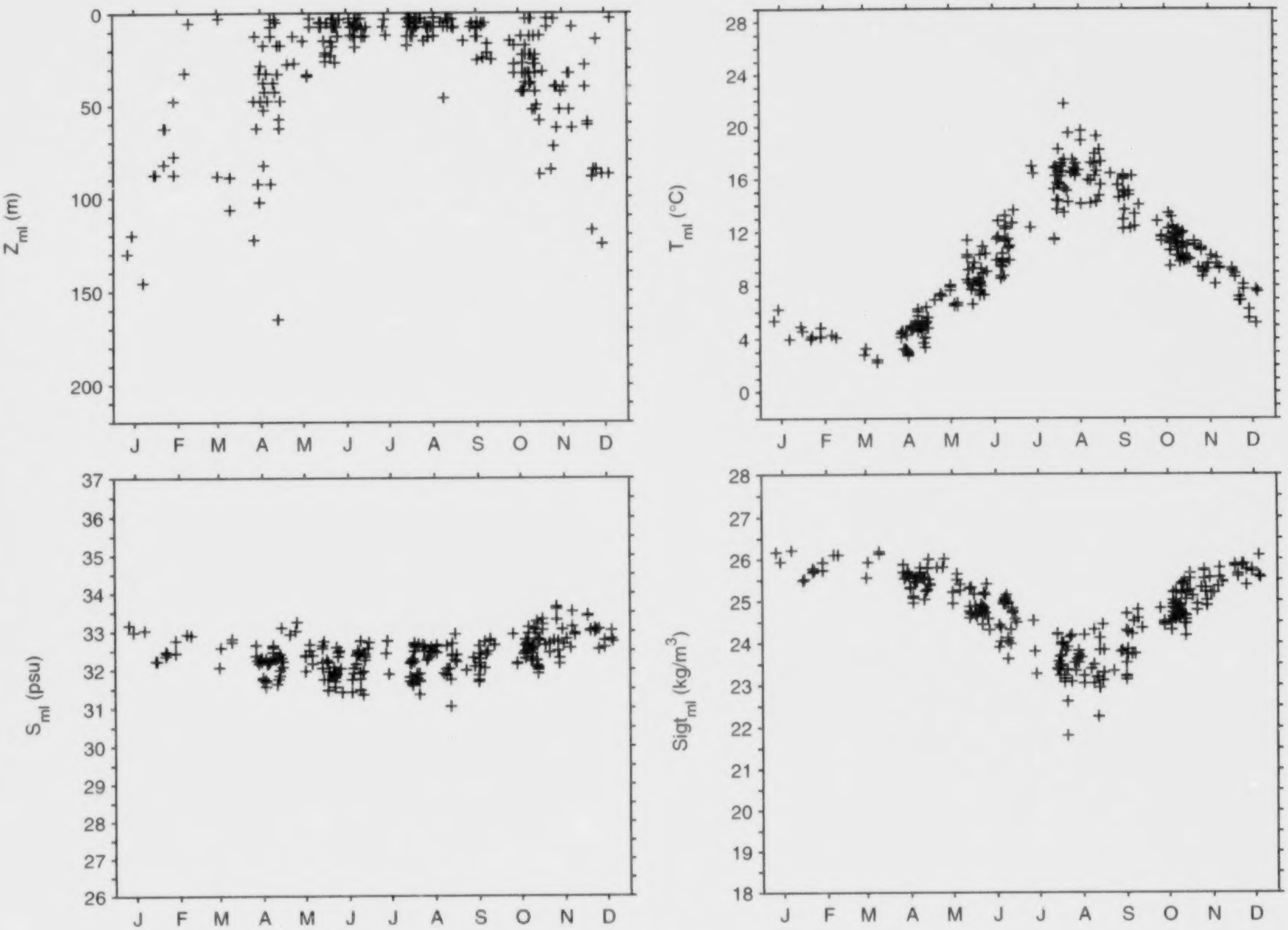

Figure 48b. Calculated mixed layer characteristics for SS45.

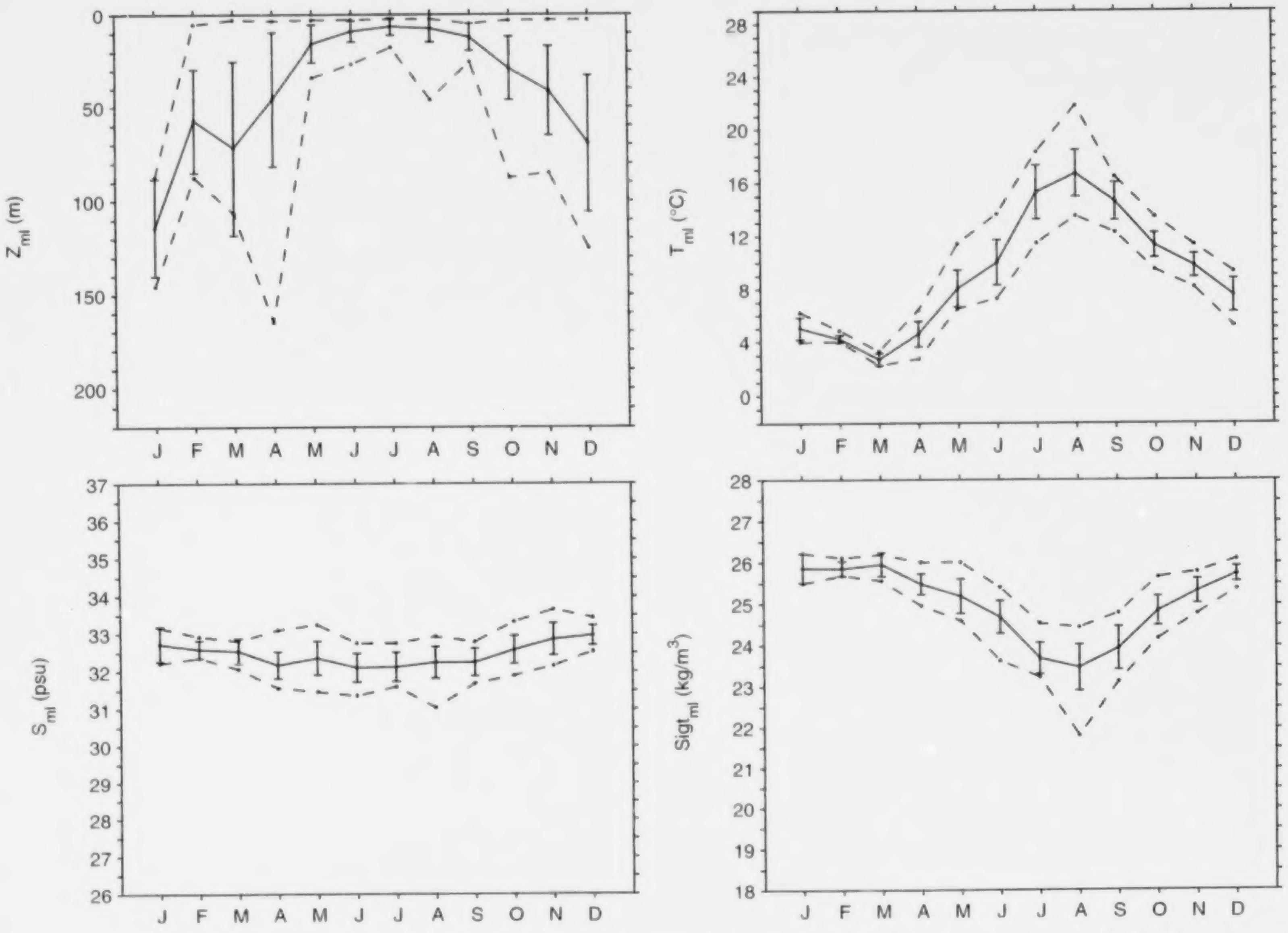

Figure 48c. Monthly statistics of mixed layer characteristics for SS45 (– : mean±sd; –– : min,max).

Table 46. Monthly statistics of mixed layer characteristics for SS45.

Profiles extracted (#) : 294   Profiles retained (#) : 262   Profiles rejected (%) : 10.9
Mean seabed depth (m) for subregion : 178.0   Mean sounding depth (m) for profiles : 190.4

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	5	8	4	35	20	41	17	37	19	43	19	14
Mixed layer depth : Z_ml (m)												
mean	114.10	57.12	71.69	45.62	15.55	9.00	6.49	7.42	12.08	28.94	41.04	69.27
median	120.00	62.50	88.62	42.50	15.00	7.50	5.00	7.50	8.50	27.50	40.00	85.00
min	87.50	5.50	3.00	3.50	3.00	2.90	2.50	2.50	5.00	3.25	3.00	3.00
max	145.50	87.50	106.50	165.00	34.00	26.50	17.50	46.00	25.25	87.50	85.00	125.00
s.d.	25.93	27.78	NaN	35.96	10.02	5.54	4.46	7.26	7.10	17.09	24.11	36.64
Mixed layer temperature : T_ml (deg.C)												
mean	5.01	4.21	2.69	4.57	8.03	9.99	15.27	16.68	14.59	11.28	9.76	7.50
median	4.91	4.15	2.62	4.75	7.80	9.84	15.70	16.63	14.80	11.27	9.62	7.63
min	3.98	3.99	2.24	2.73	6.49	7.28	11.43	13.47	12.26	9.46	8.12	5.19
max	6.21	4.84	3.28	6.39	11.40	13.64	18.29	21.76	16.45	13.44	11.32	9.30
s.d.	0.84	0.27	NaN	0.95	1.40	1.68	2.03	1.74	1.41	0.92	0.87	1.28
Mixed layer salinity : S_ml (psu)												
mean	32.73	32.59	32.55	32.18	32.36	32.11	32.13	32.25	32.26	32.59	32.87	32.97
median	32.99	32.46	32.65	32.23	32.37	32.07	32.18	32.39	32.29	32.57	32.77	33.03
min	32.22	32.36	32.07	31.56	31.47	31.36	31.60	31.05	31.69	31.90	32.16	32.54
max	33.17	32.93	32.81	33.10	33.25	32.76	32.76	32.94	32.79	33.33	33.65	33.44
s.d.	0.46	0.23	NaN	0.36	0.45	0.38	0.39	0.42	0.36	0.38	0.42	0.26
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.87	25.85	25.95	25.48	25.19	24.68	23.69	23.47	23.94	24.84	25.32	25.74
median	25.94	25.76	26.03	25.54	25.21	24.77	23.56	23.48	23.82	24.79	25.32	25.75
min	25.49	25.69	25.56	24.96	24.60	23.62	23.23	21.80	23.13	24.18	24.78	25.38
max	26.22	26.11	26.19	26.00	26.01	25.41	24.54	24.44	24.79	25.66	25.79	26.10
s.d.	0.35	0.18	NaN	0.25	0.42	0.40	0.38	0.56	0.52	0.35	0.29	0.18

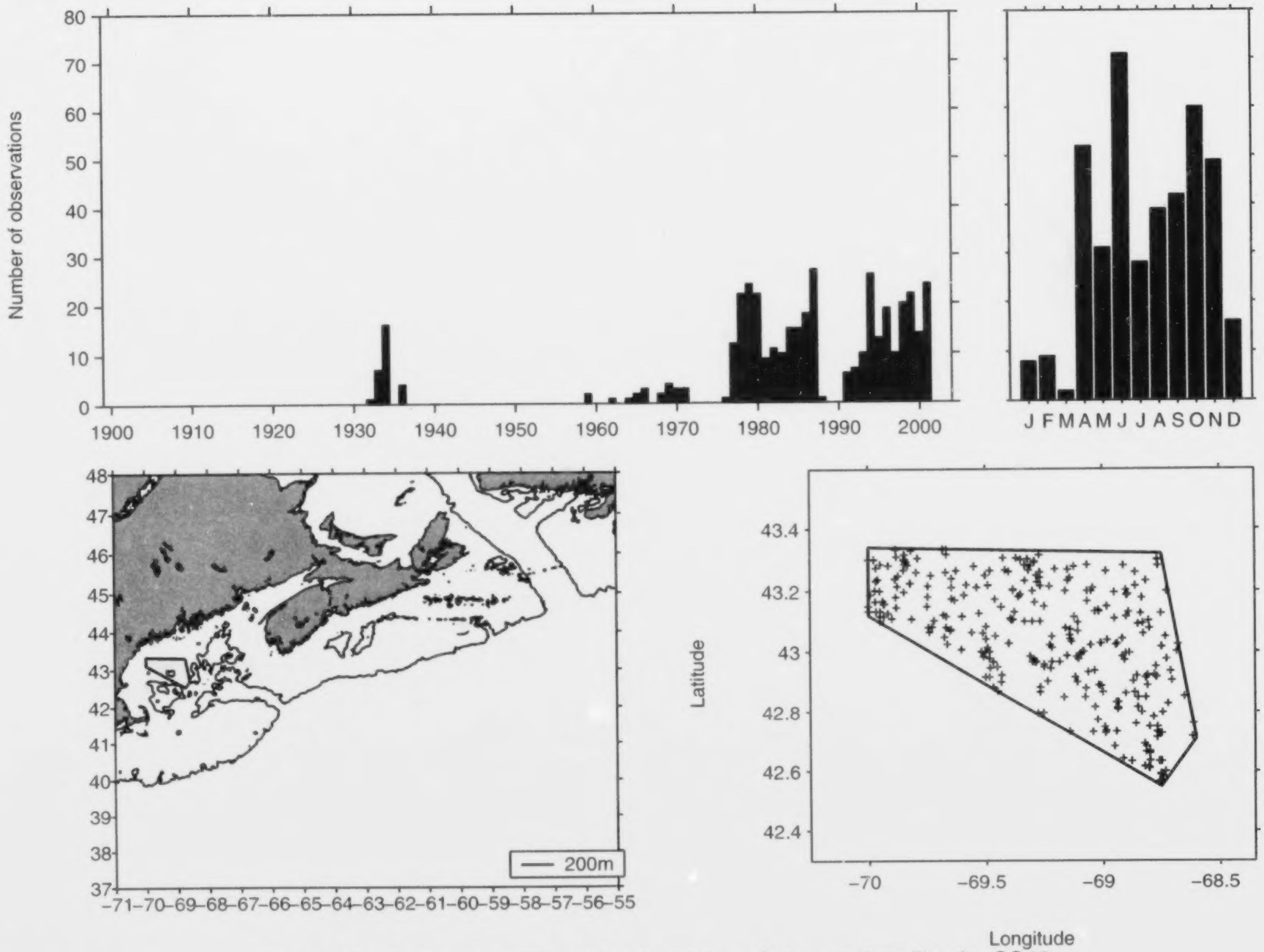

Figure 49a. Temporal and spatial distributions of observed profiles for SS46.

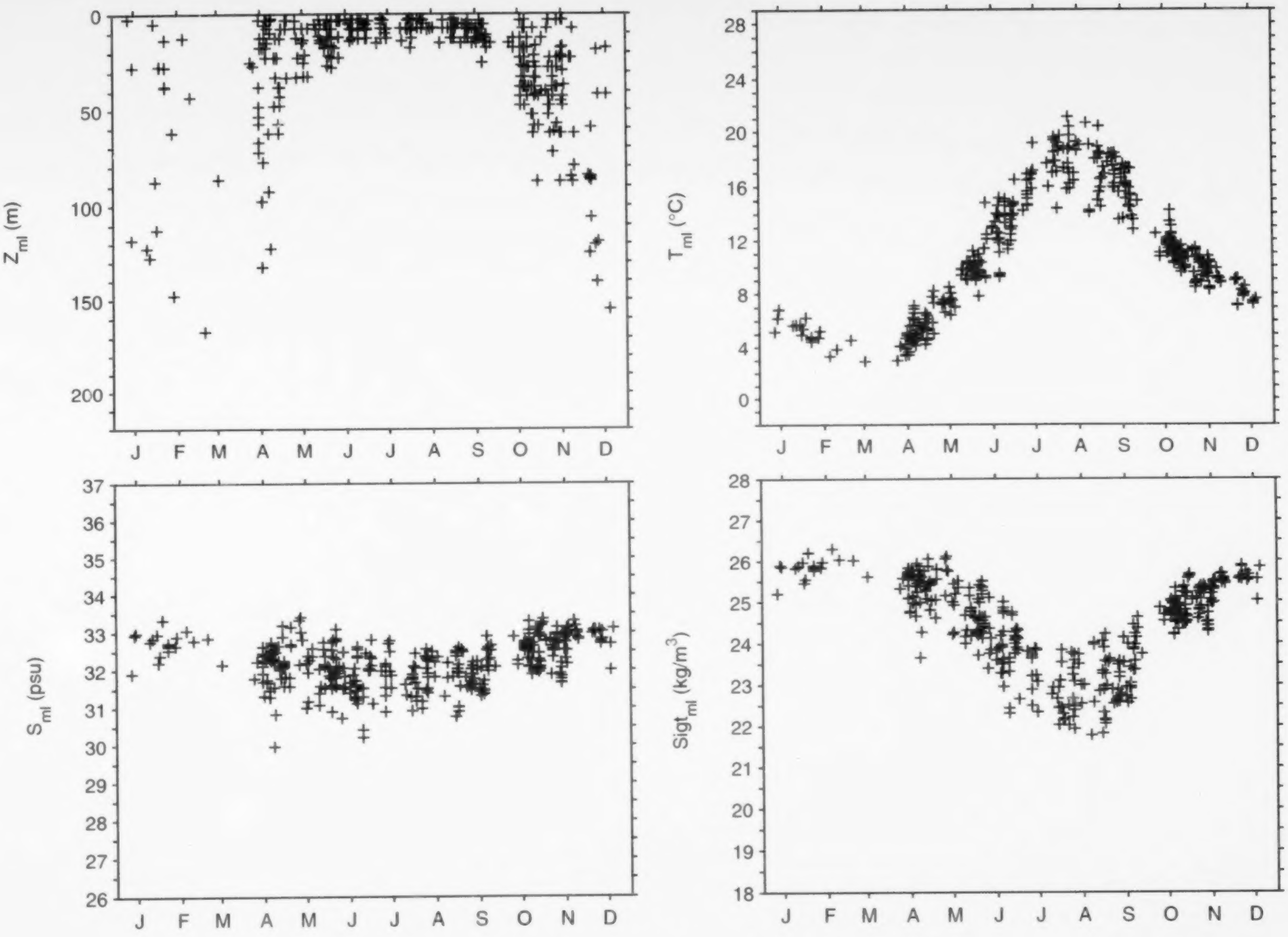

Figure 49b. Calculated mixed layer characteristics for SS46.

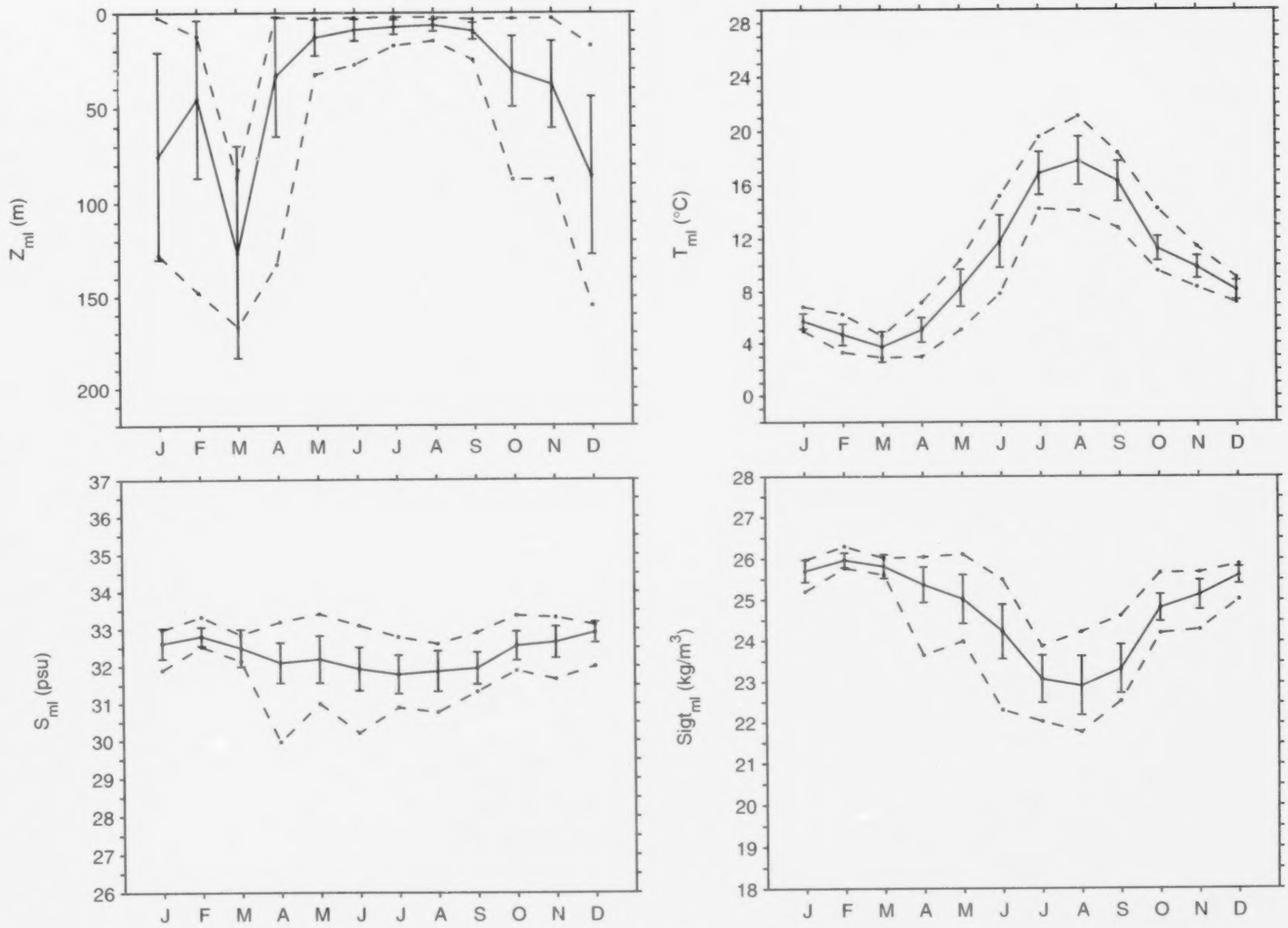

Figure 49c. Monthly statistics of mixed layer characteristics for SS46 (– : mean±sd; –– : min,max).

Table 47. Monthly statistics of mixed layer characteristics for SS46.

Profiles extracted (#) : 515 Profiles retained (#) : 407 Profiles rejected (%) : 21.0
Mean seabed depth (m) for subregion : 112.1 Mean sounding depth (m) for profiles : 102.3

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	8	9	2	52	31	71	28	39	42	60	49	16
Mixed layer depth : Z_ml (m)												
mean	75.38	45.34	126.62	33.57	13.17	9.18	7.61	6.68	9.73	30.93	37.86	85.78
median	100.00	37.15	126.62	22.50	11.50	7.80	7.50	7.50	7.53	30.00	37.50	85.75
min	2.50	12.50	86.50	2.50	3.00	2.75	2.25	2.50	3.50	3.25	3.00	17.50
max	127.50	147.75	166.75	132.50	32.65	27.50	17.50	15.00	25.00	87.50	87.50	155.00
s.d.	54.56	41.32	NaN	31.29	9.53	5.75	3.90	3.14	4.48	18.45	22.76	41.51
Mixed layer temperature : T_ml (deg.C)												
mean	5.70	4.67	3.73	5.02	8.27	11.79	16.87	17.80	16.29	11.27	9.86	8.10
median	5.67	4.73	3.73	4.93	8.06	11.96	16.87	18.30	16.59	11.14	9.92	8.02
min	4.95	3.32	2.91	2.97	5.03	7.84	14.24	14.10	12.81	9.58	8.32	7.13
max	6.83	6.23	4.55	7.12	10.40	15.17	19.56	21.10	18.40	14.25	11.41	9.08
s.d.	0.59	0.81	NaN	0.94	1.43	1.96	1.59	1.79	1.50	0.91	0.85	0.76
Mixed layer salinity : S_ml (psu)												
mean	32.62	32.81	32.50	32.10	32.19	31.93	31.79	31.87	31.95	32.55	32.64	32.91
median	32.80	32.72	32.50	32.23	32.15	32.00	31.83	31.94	31.94	32.60	32.77	33.03
min	31.90	32.53	32.14	29.97	31.01	30.21	30.89	30.77	31.32	31.89	31.66	32.00
max	32.98	33.33	32.85	33.19	33.41	33.09	32.78	32.60	32.90	33.36	33.31	33.11
s.d.	0.41	0.25	NaN	0.54	0.63	0.58	0.51	0.54	0.43	0.39	0.42	0.28
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.70	25.97	25.82	25.37	25.02	24.23	23.07	22.91	23.33	24.81	25.13	25.61
median	25.84	25.89	25.82	25.45	24.99	24.24	23.00	22.89	23.32	24.77	25.28	25.59
min	25.20	25.77	25.61	23.65	23.99	22.31	22.03	21.77	22.54	24.20	24.29	25.02
max	25.97	26.30	26.02	26.05	26.11	25.50	23.87	24.22	24.62	25.67	25.69	25.88
s.d.	0.27	0.18	NaN	0.43	0.59	0.66	0.58	0.72	0.59	0.33	0.36	0.21

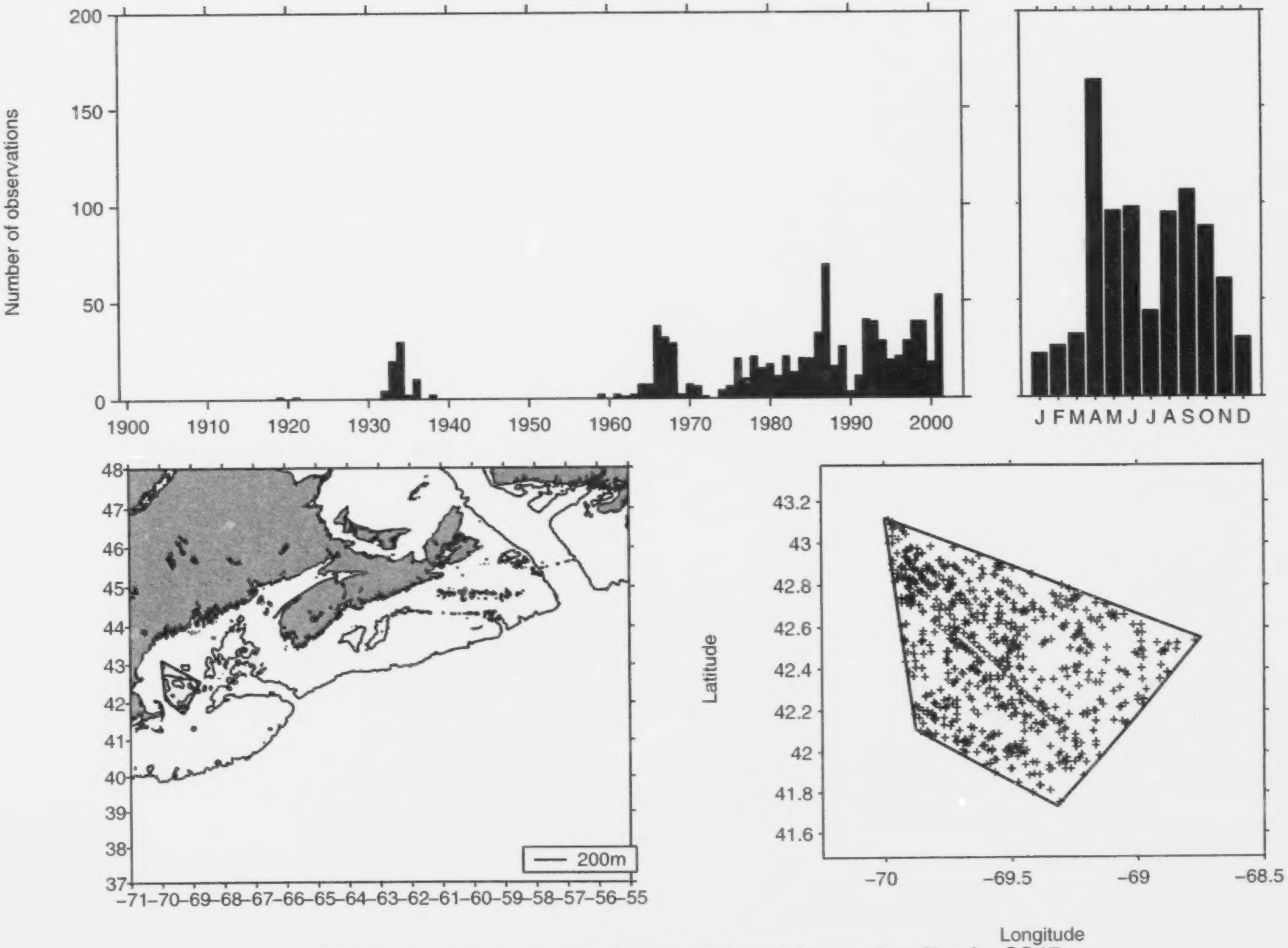

Figure 50a. Temporal and spatial distributions of observed profiles for SS47.

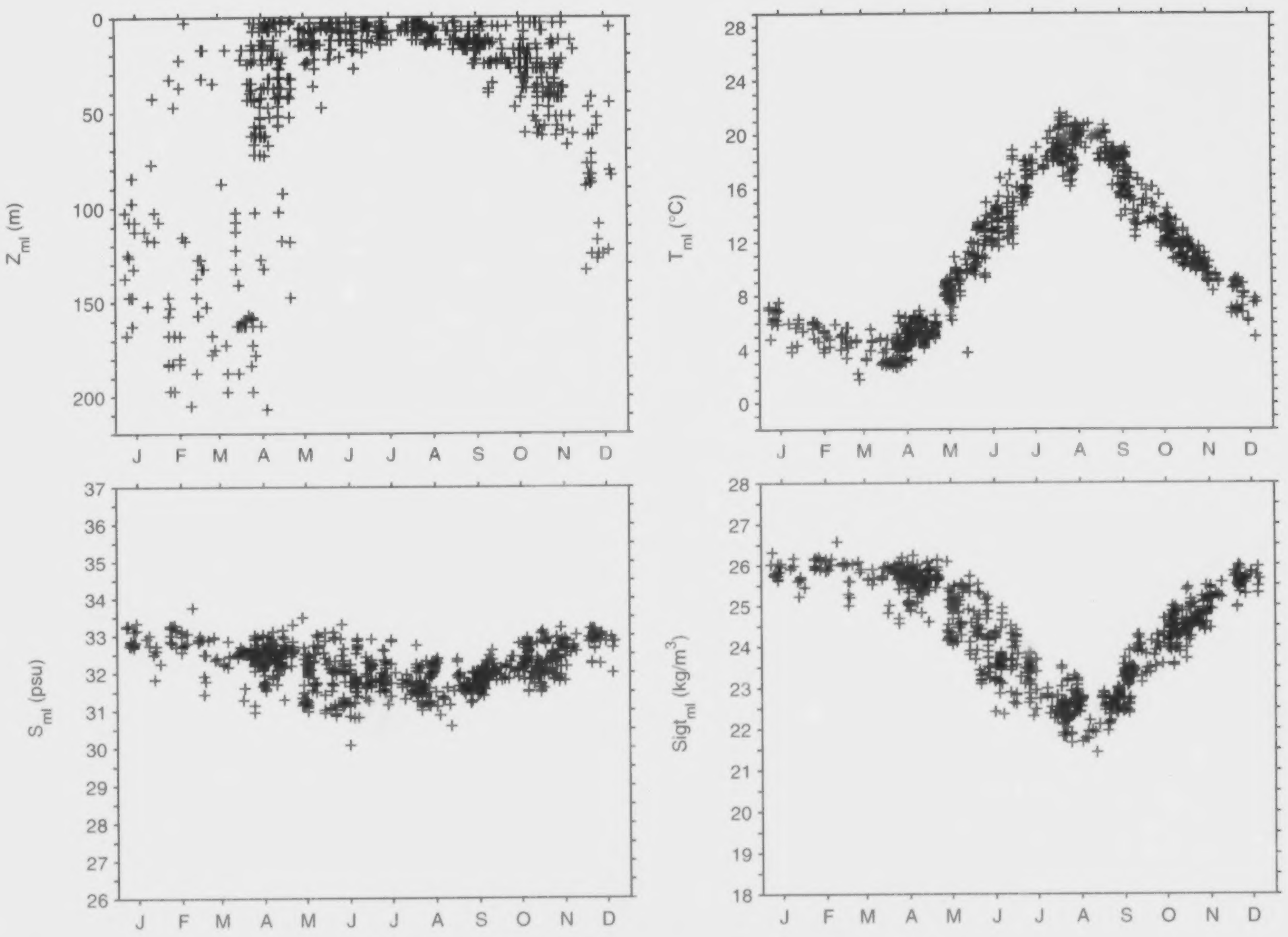

Figure 50b. Calculated mixed layer characteristics for SS47.

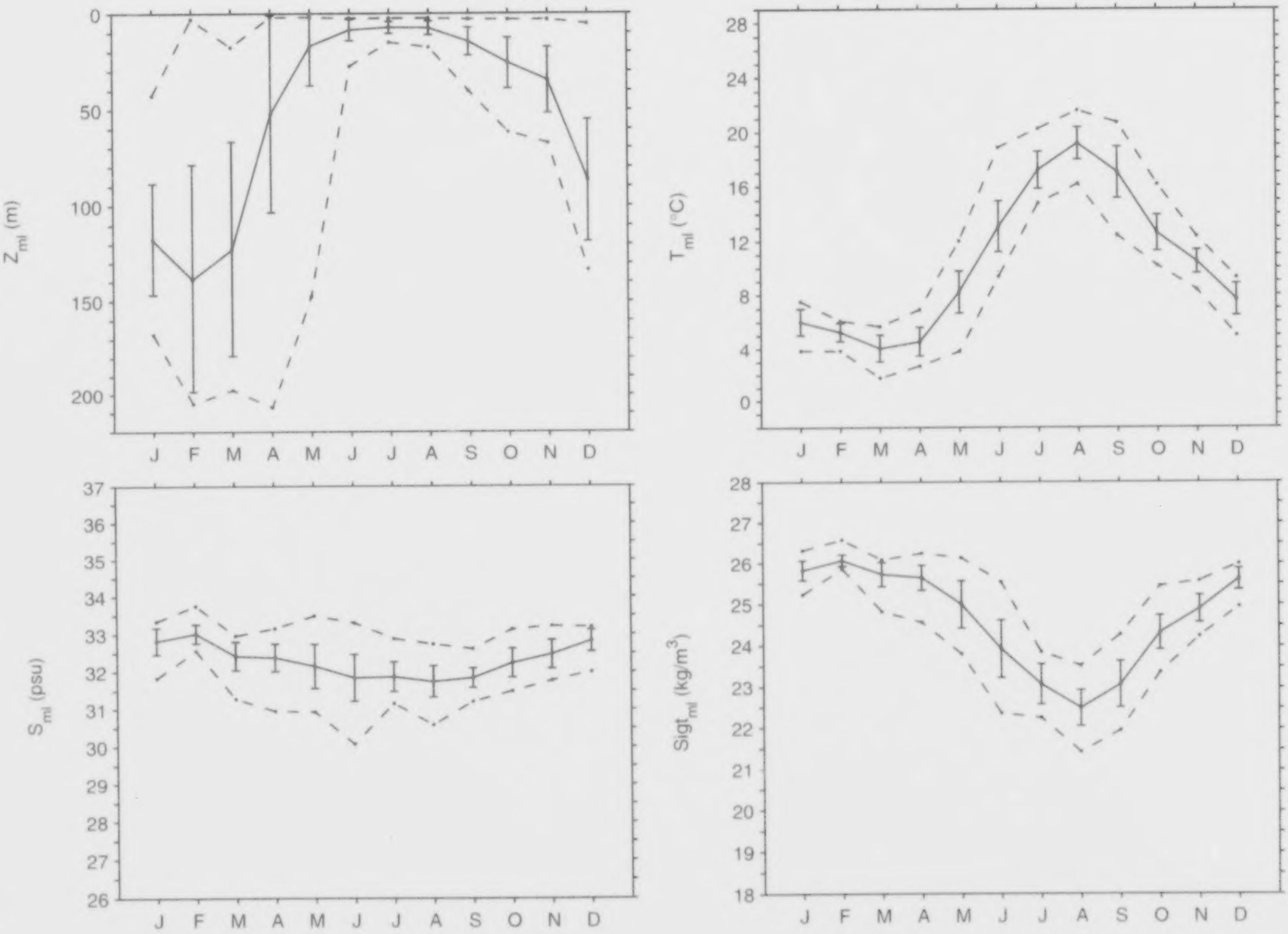

Figure 50c. Monthly statistics of mixed layer characteristics for SS47 (– : mean±sd; -- : min,max).

Table 48. Monthly statistics of mixed layer characteristics for SS47.

Profiles extracted (#) : 1047   Profiles retained (#) : 863   Profiles rejected (%) : 17.6
Mean seabed depth (m) for subregion : 194.9   Mean sounding depth (m) for profiles : 199.2

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	22	26	32	164	94	100	43	96	107	88	61	30
Mixed layer depth : Z_ml (m)												
mean	117.61	138.57	122.72	52.10	16.87	8.55	7.28	7.55	14.55	25.71	34.55	86.73
median	114.75	157.12	132.50	37.33	11.93	7.50	7.50	7.50	14.50	25.00	37.50	84.50
min	42.50	3.00	17.50	2.00	2.00	2.50	2.50	2.50	3.00	3.25	3.25	5.50
max	167.50	205.00	197.50	207.00	147.65	27.40	15.00	17.50	40.00	61.50	67.50	133.50
s.d.	29.11	59.82	56.13	51.24	20.49	5.50	3.12	3.58	7.25	13.13	17.05	31.78
Mixed layer temperature : T_ml (deg.C)												
mean	6.01	5.27	4.05	4.55	8.21	13.07	17.18	19.14	17.02	12.60	10.46	7.64
median	6.19	5.34	4.36	4.48	8.47	13.12	17.39	19.26	17.64	12.46	10.49	7.53
min	3.87	3.86	1.77	2.70	3.81	9.36	14.77	16.17	12.41	10.16	8.36	5.00
max	7.53	6.10	5.69	6.91	12.00	18.82	20.23	21.59	20.70	16.14	12.34	9.27
s.d.	0.98	0.68	1.01	1.08	1.55	1.86	1.35	1.19	1.88	1.33	0.89	1.18
Mixed layer salinity : S_ml (psu)												
mean	32.82	33.02	32.42	32.38	32.15	31.85	31.87	31.74	31.84	32.24	32.47	32.83
median	32.79	33.00	32.47	32.43	32.22	31.80	31.77	31.70	31.86	32.21	32.57	32.88
min	31.83	32.56	31.28	30.95	30.94	30.08	31.16	30.58	31.21	31.49	31.77	32.00
max	33.34	33.76	32.96	33.16	33.49	33.31	32.89	32.74	32.61	33.13	33.22	33.19
s.d.	0.35	0.25	0.38	0.36	0.59	0.62	0.39	0.42	0.26	0.38	0.38	0.29
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.82	26.07	25.73	25.64	25.00	23.92	23.07	22.49	23.07	24.32	24.89	25.61
median	25.80	26.06	25.72	25.71	25.04	23.84	23.08	22.55	22.98	24.36	24.91	25.67
min	25.23	25.86	24.82	24.56	23.80	22.36	22.25	21.43	21.95	23.37	24.24	24.95
max	26.32	26.58	26.09	26.25	26.14	25.54	23.85	23.52	24.28	25.44	25.56	25.99
s.d.	0.25	0.15	0.30	0.31	0.57	0.69	0.49	0.44	0.56	0.41	0.32	0.26

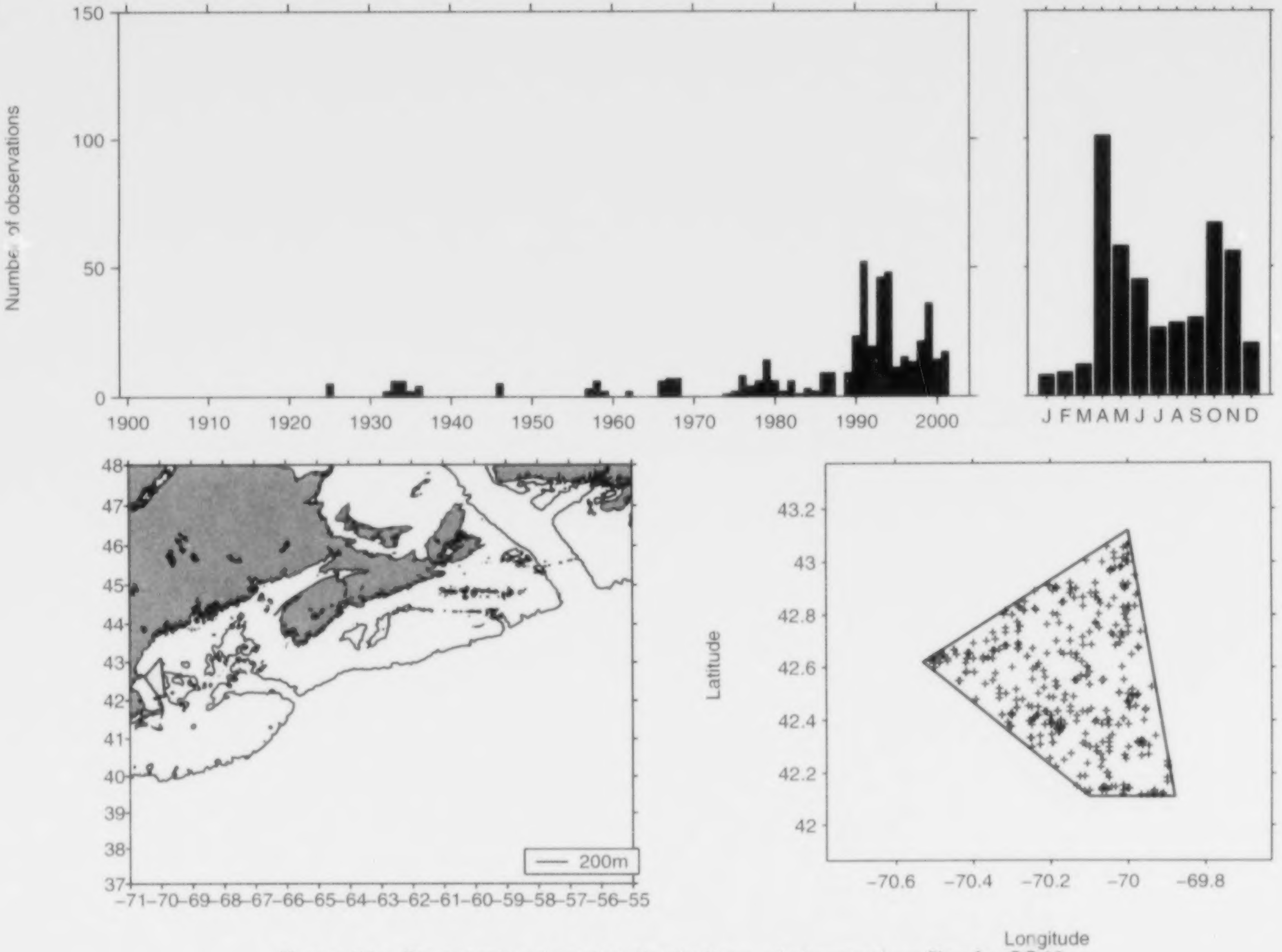

Figure 51a. Temporal and spatial distributions of observed profiles for SS48.

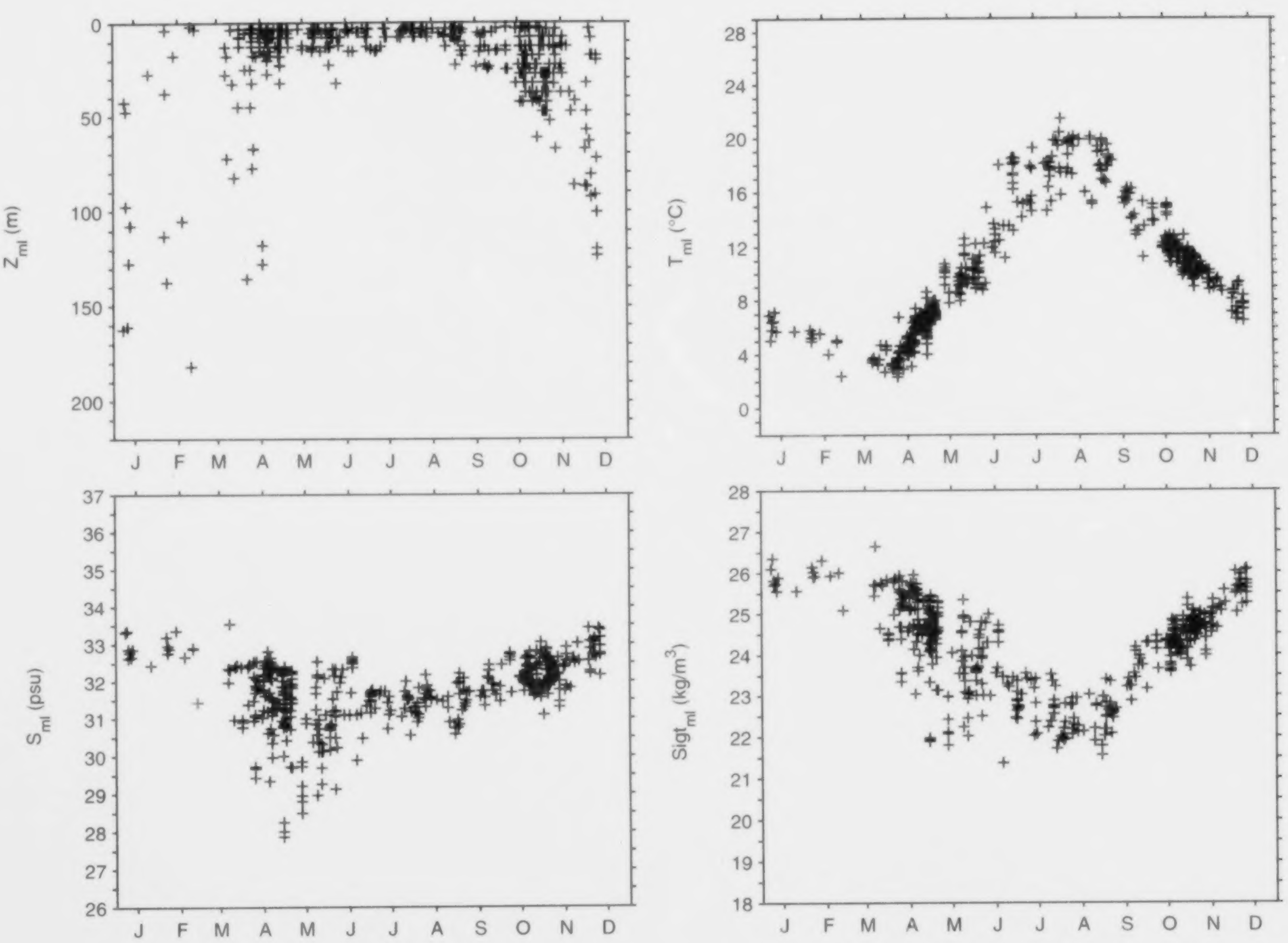

Figure 51b. Calculated mixed layer characteristics for SS48.

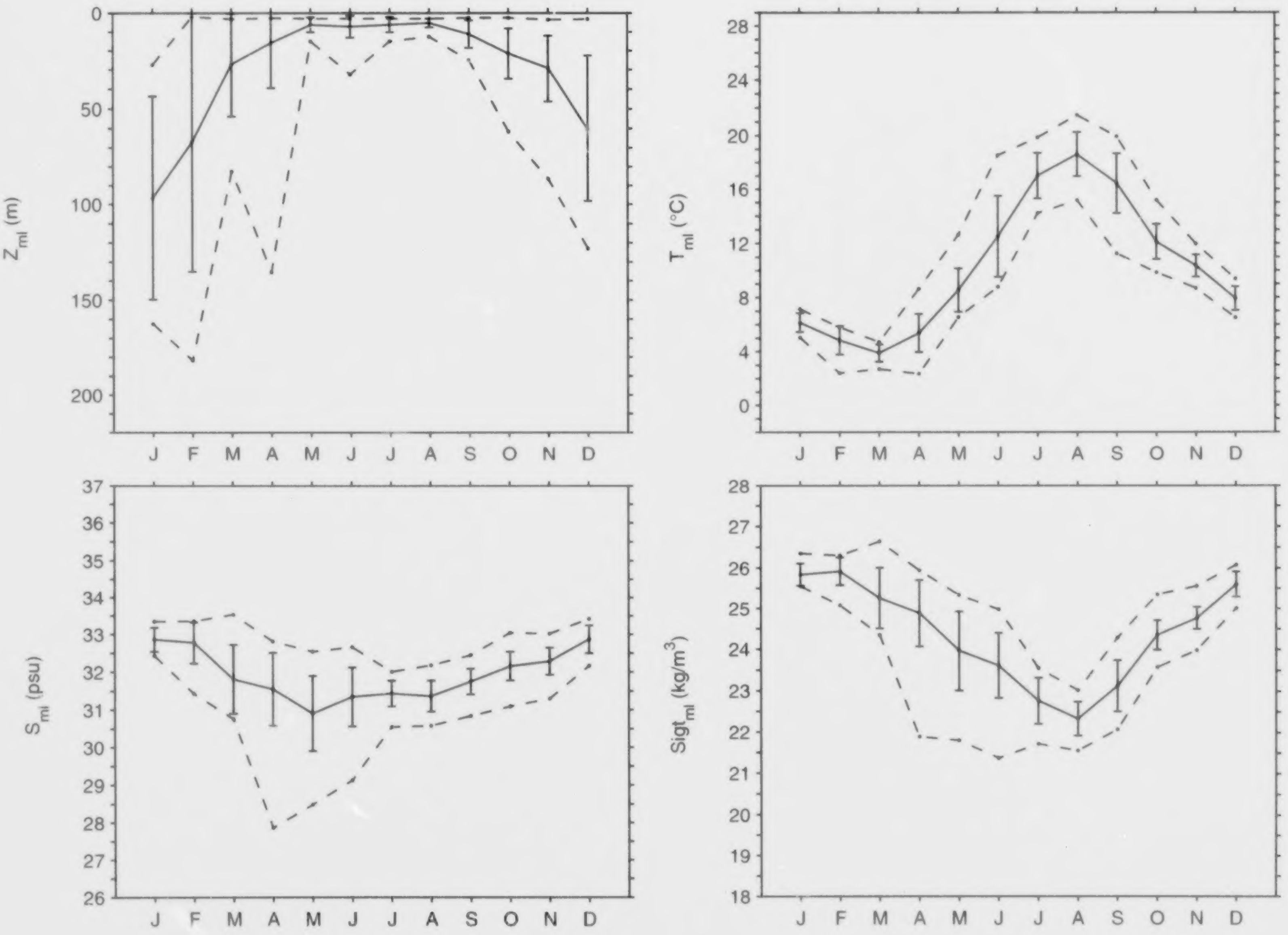

Figure 51c. Monthly statistics of mixed layer characteristics for SS48 (– : mean±sd; –– : min,max).

Table 49. Monthly statistics of mixed layer characteristics for SS48.

Profiles extracted (#) : 655 Profiles retained (#) : 460 Profiles rejected (%) : 29.8
Mean seabed depth (m) for subregion : 76.5 Mean sounding depth (m) for profiles : 78.1

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	8	9	12	101	58	45	26	28	30	67	56	20
Mixed layer depth : Z_ml (m)												
mean	96.67	66.85	27.15	15.84	6.21	7.22	6.11	5.21	11.13	21.44	29.08	60.36
median	102.50	37.80	15.30	7.80	3.65	5.00	3.70	5.00	9.62	22.50	27.50	65.50
min	27.50	2.00	3.25	2.75	3.00	3.00	3.00	3.00	2.50	2.50	3.50	3.25
max	162.50	181.75	82.50	135.50	15.00	32.50	15.00	12.50	25.00	61.50	86.50	123.00
s.d.	53.01	68.22	26.74	23.59	3.93	5.73	4.09	2.27	7.29	13.23	17.05	37.85
Mixed layer temperature : T_ml (deg.C)												
mean	6.15	4.84	3.90	5.37	8.54	12.51	17.01	18.60	16.43	12.12	10.35	7.93
median	6.11	5.07	3.70	5.56	7.98	11.59	17.67	19.16	16.51	11.90	10.26	7.83
min	5.04	2.40	2.71	2.36	6.55	8.78	14.20	15.16	11.25	9.85	8.68	6.52
max	7.14	5.81	4.71	8.64	12.63	18.53	19.85	21.47	19.93	15.17	11.96	9.38
s.d.	0.70	1.05	0.64	1.41	1.60	2.98	1.70	1.64	2.24	1.29	0.82	0.88
Mixed layer salinity : S_ml (psu)												
mean	32.86	32.78	31.81	31.55	30.91	31.35	31.43	31.37	31.75	32.16	32.28	32.87
median	32.82	32.88	32.15	31.75	31.08	31.34	31.55	31.48	31.74	32.11	32.30	32.91
min	32.44	31.43	30.76	27.87	28.49	29.13	30.55	30.58	30.84	31.09	31.29	32.17
max	33.35	33.36	33.54	32.81	32.54	32.66	32.01	32.18	32.44	33.04	33.02	33.42
s.d.	0.32	0.55	0.91	0.96	1.00	0.78	0.34	0.41	0.34	0.38	0.36	0.37
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.84	25.92	25.26	24.89	23.97	23.62	22.77	22.33	23.13	24.35	24.77	25.61
median	25.78	26.00	25.56	25.12	24.19	23.61	22.74	22.20	23.19	24.32	24.73	25.64
min	25.56	25.08	24.35	21.89	21.80	21.37	21.72	21.56	22.08	23.58	23.99	25.02
max	26.36	26.31	26.65	25.95	25.34	24.99	23.55	23.02	24.29	25.36	25.56	26.08
s.d.	0.27	0.34	0.75	0.82	0.96	0.79	0.56	0.41	0.62	0.36	0.27	0.31

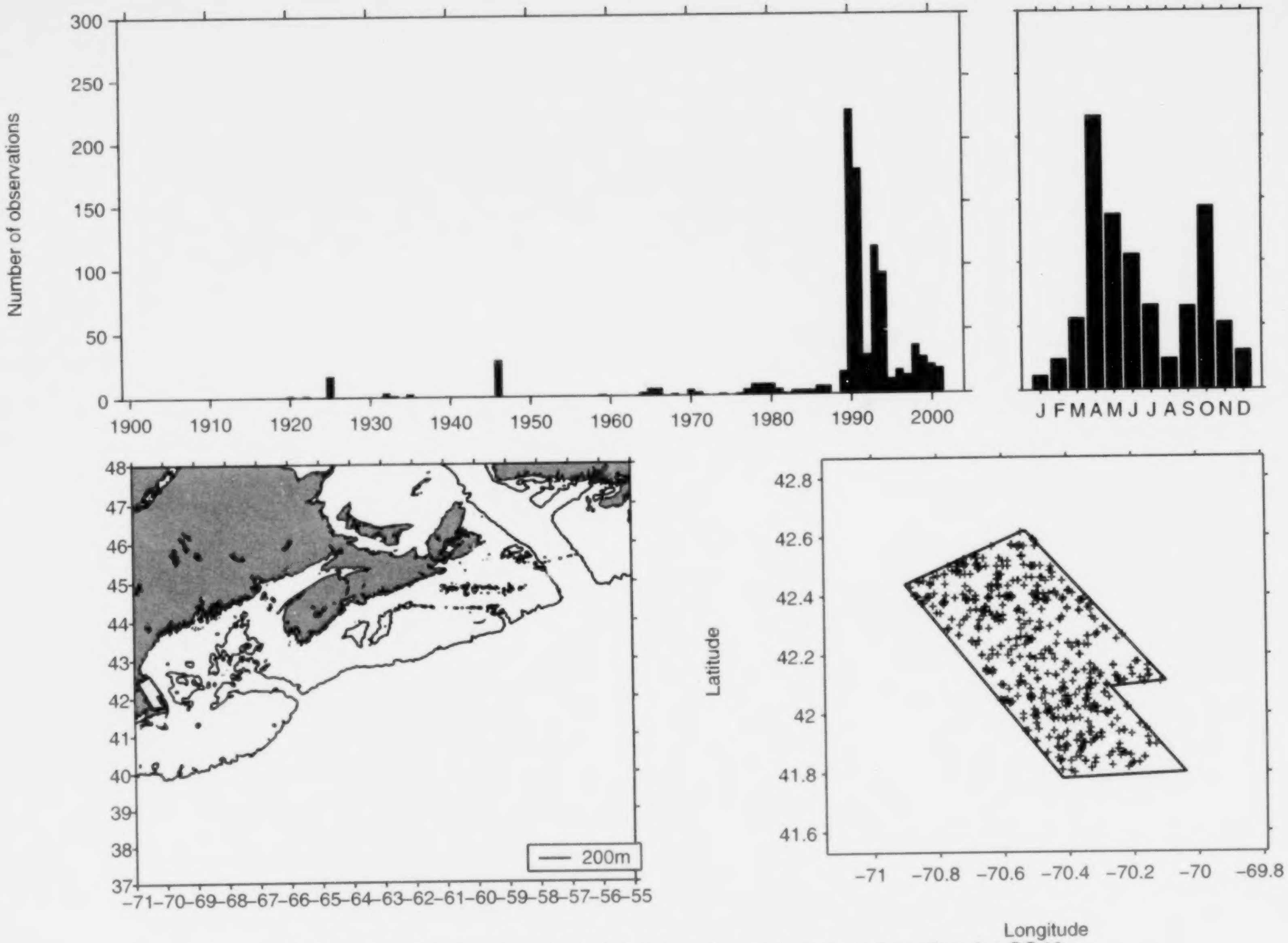

Figure 52a. Temporal and spatial distributions of observed profiles for SS49.

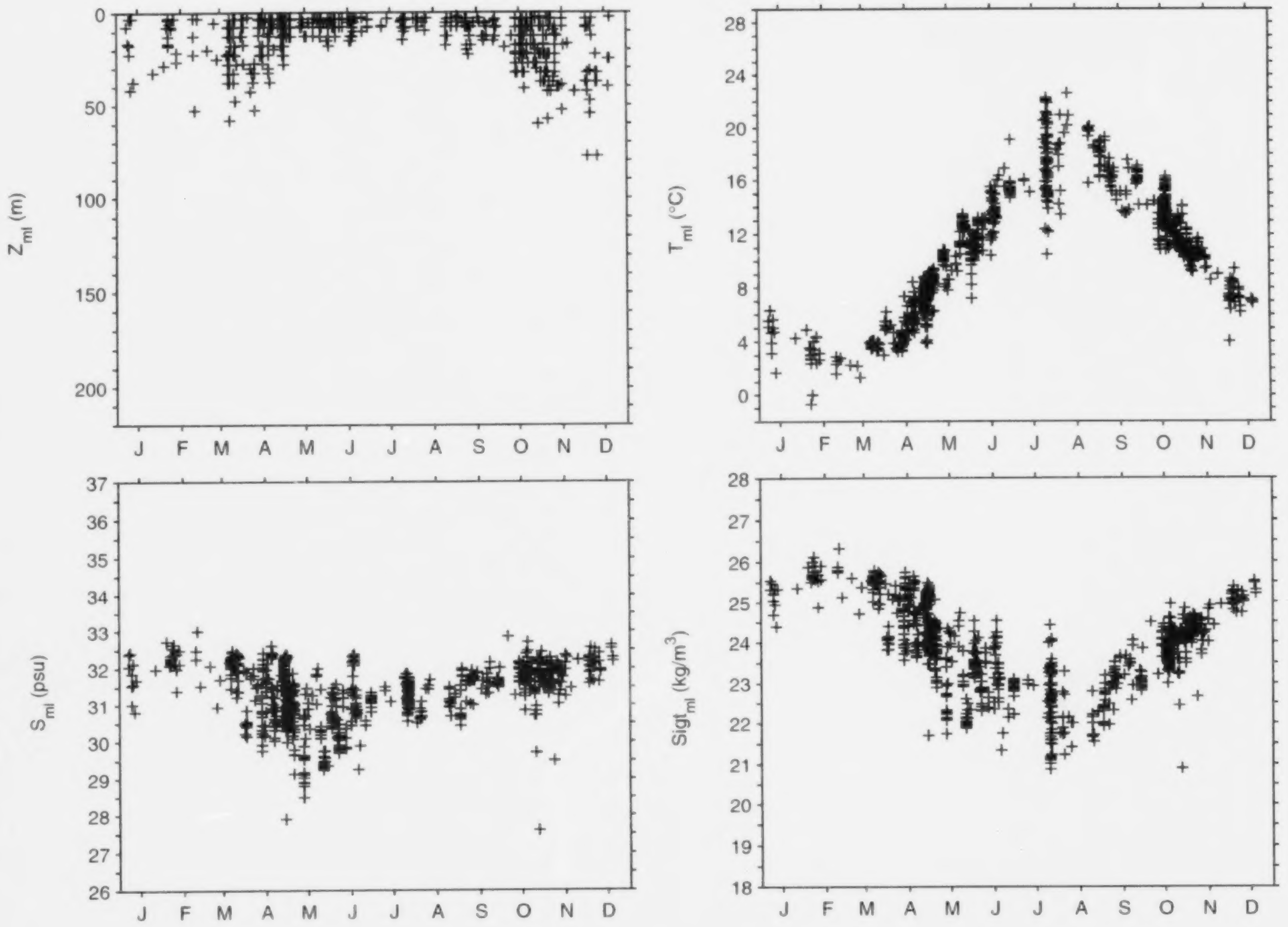

Figure 52b. Calculated mixed layer characteristics for SS49.

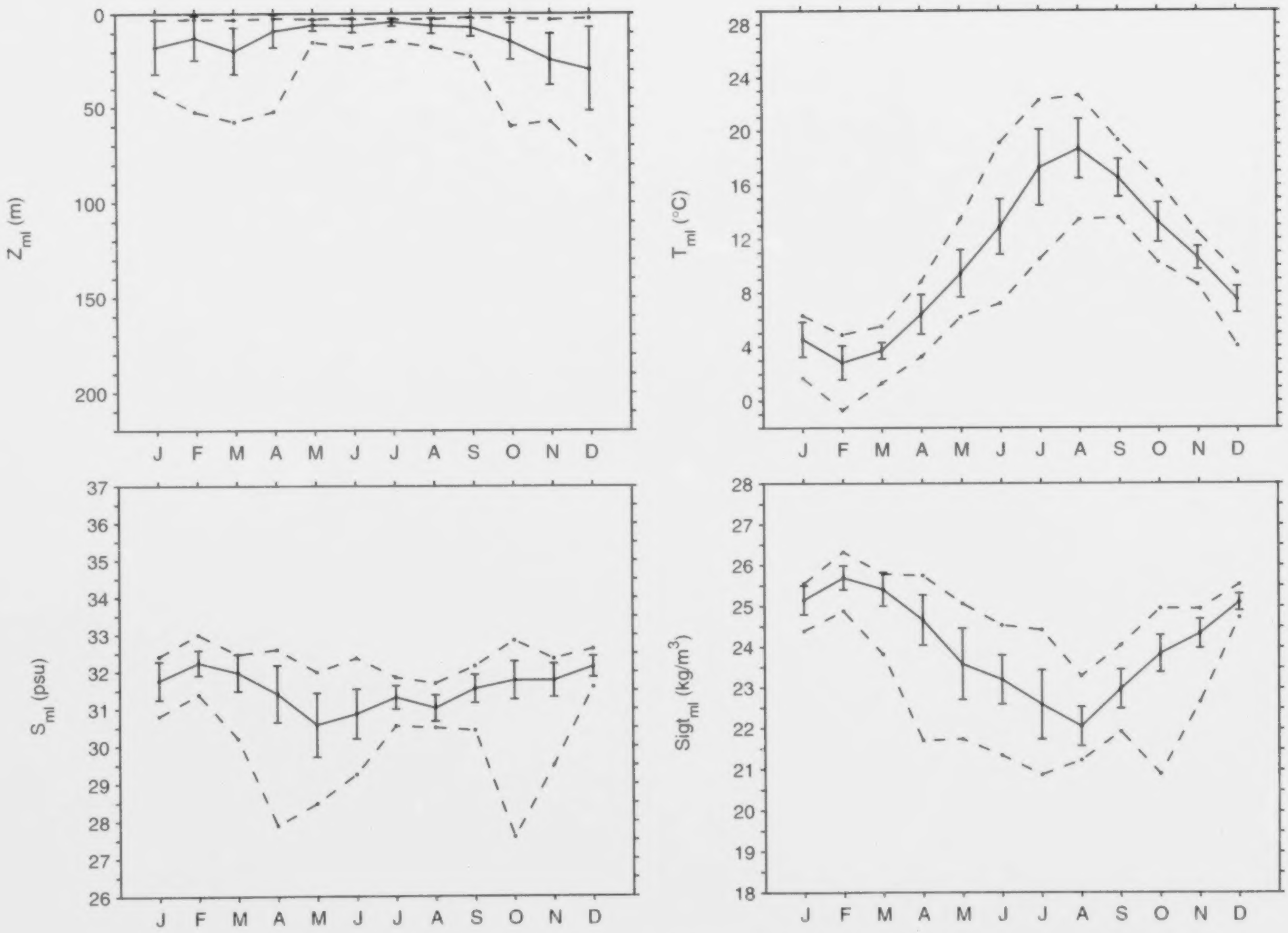

Figure 52c. Monthly statistics of mixed layer characteristics for SS49 (– : mean±sd; -- : min,max).

Table 50. Monthly statistics of mixed layer characteristics for SS49.

Profiles extracted (#) : 1284 Profiles retained (#) : 932 Profiles rejected (%) : 27.4
Mean seabed depth (m) for subregion : 32.8 Mean sounding depth (m) for profiles : 32.6

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	11	24	56	216	138	106	66	24	65	144	52	30
Mixed layer depth : Z_ml (m)												
mean	17.55	12.73	19.62	9.15	5.99	6.27	4.46	6.33	7.16	14.47	24.17	29.52
median	16.50	8.15	18.93	5.25	3.80	5.00	3.60	4.25	5.50	12.80	22.50	32.00
min	3.25	3.00	3.25	2.50	3.00	2.50	3.05	3.00	2.00	2.50	3.25	2.50
max	41.75	52.50	57.80	52.40	15.00	17.80	14.50	17.50	22.50	60.00	57.50	77.50
s.d.	14.31	11.64	12.35	8.49	2.95	3.48	2.05	4.01	4.71	9.68	13.70	22.30
Mixed layer temperature : T_ml (deg.C)												
mean	4.55	2.84	3.72	6.40	9.43	12.90	17.29	18.67	16.51	13.23	10.59	7.47
median	4.72	2.95	3.81	6.85	8.77	12.95	17.27	19.09	16.62	13.32	10.51	7.39
min	1.70	-0.70	1.33	3.27	6.19	7.21	10.50	13.44	13.56	10.27	8.60	4.04
max	6.31	4.87	5.50	8.84	13.47	19.10	22.26	22.62	19.30	16.30	12.45	9.45
s.d.	1.28	1.23	0.59	1.47	1.75	2.05	2.80	2.18	1.39	1.46	0.85	0.99
Mixed layer salinity : S_ml (psu)												
mean	31.77	32.25	31.98	31.42	30.59	30.88	31.32	31.03	31.55	31.78	31.78	32.15
median	31.86	32.25	32.16	31.56	30.84	30.82	31.39	31.00	31.66	31.89	31.89	32.18
min	30.81	31.39	30.21	27.90	28.49	29.26	30.55	30.51	30.43	27.59	29.50	31.59
max	32.42	33.00	32.48	32.61	32.00	32.38	31.86	31.70	32.16	32.85	32.36	32.62
s.d.	0.52	0.34	0.50	0.77	0.85	0.67	0.31	0.35	0.38	0.51	0.45	0.28
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.15	25.70	25.41	24.66	23.59	23.20	22.59	22.06	22.98	23.84	24.34	25.10
median	25.32	25.68	25.54	24.87	23.91	23.14	22.67	22.00	23.01	23.83	24.35	25.09
min	24.39	24.88	23.82	21.70	21.74	21.34	20.87	21.23	21.93	20.90	22.66	24.73
max	25.54	26.33	25.79	25.75	25.07	24.54	24.42	23.29	24.05	24.95	24.94	25.53
s.d.	0.35	0.29	0.41	0.62	0.88	0.61	0.85	0.48	0.48	0.45	0.35	0.20

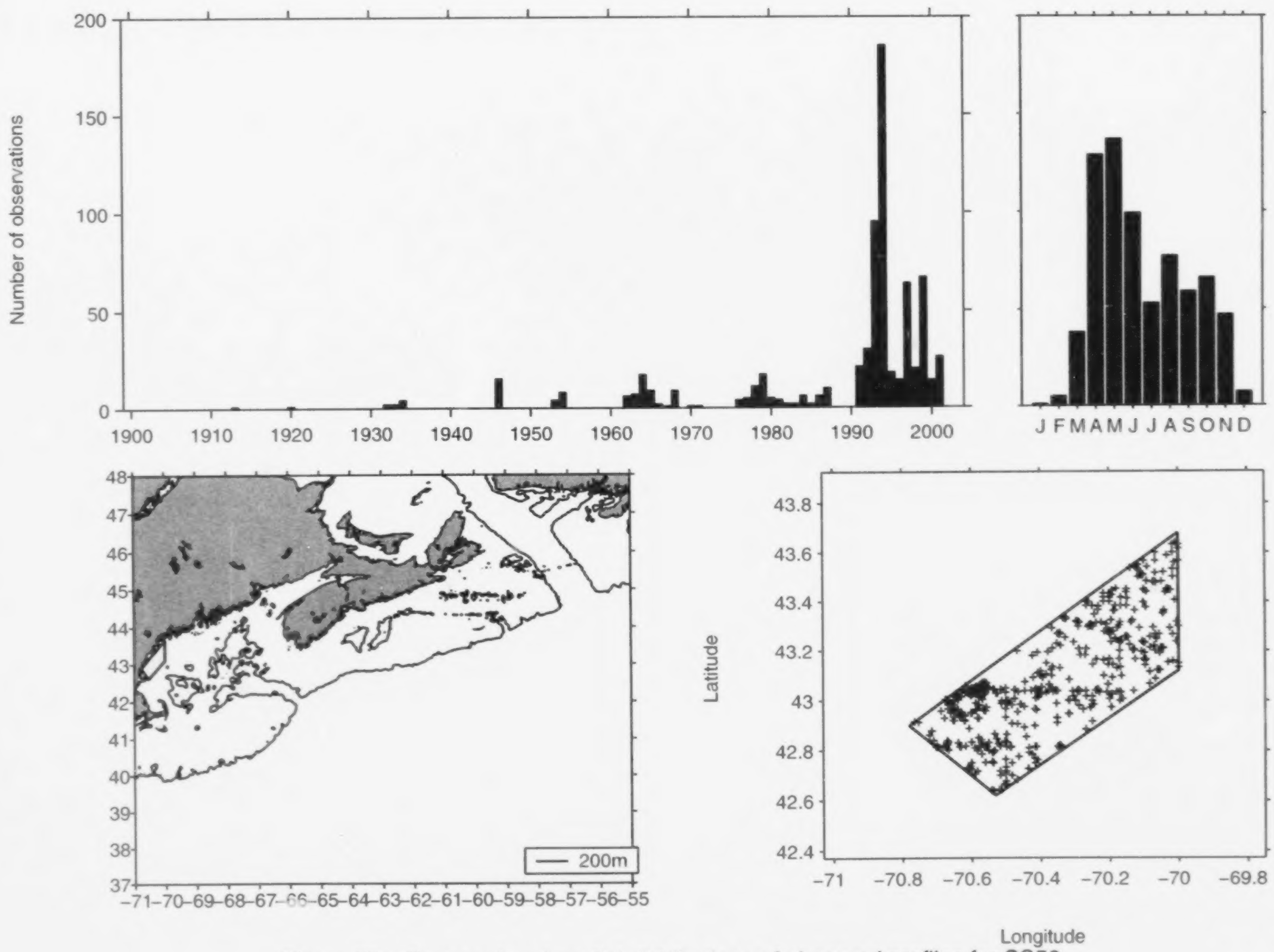

Figure 53a. Temporal and spatial distributions of observed profiles for SS50.

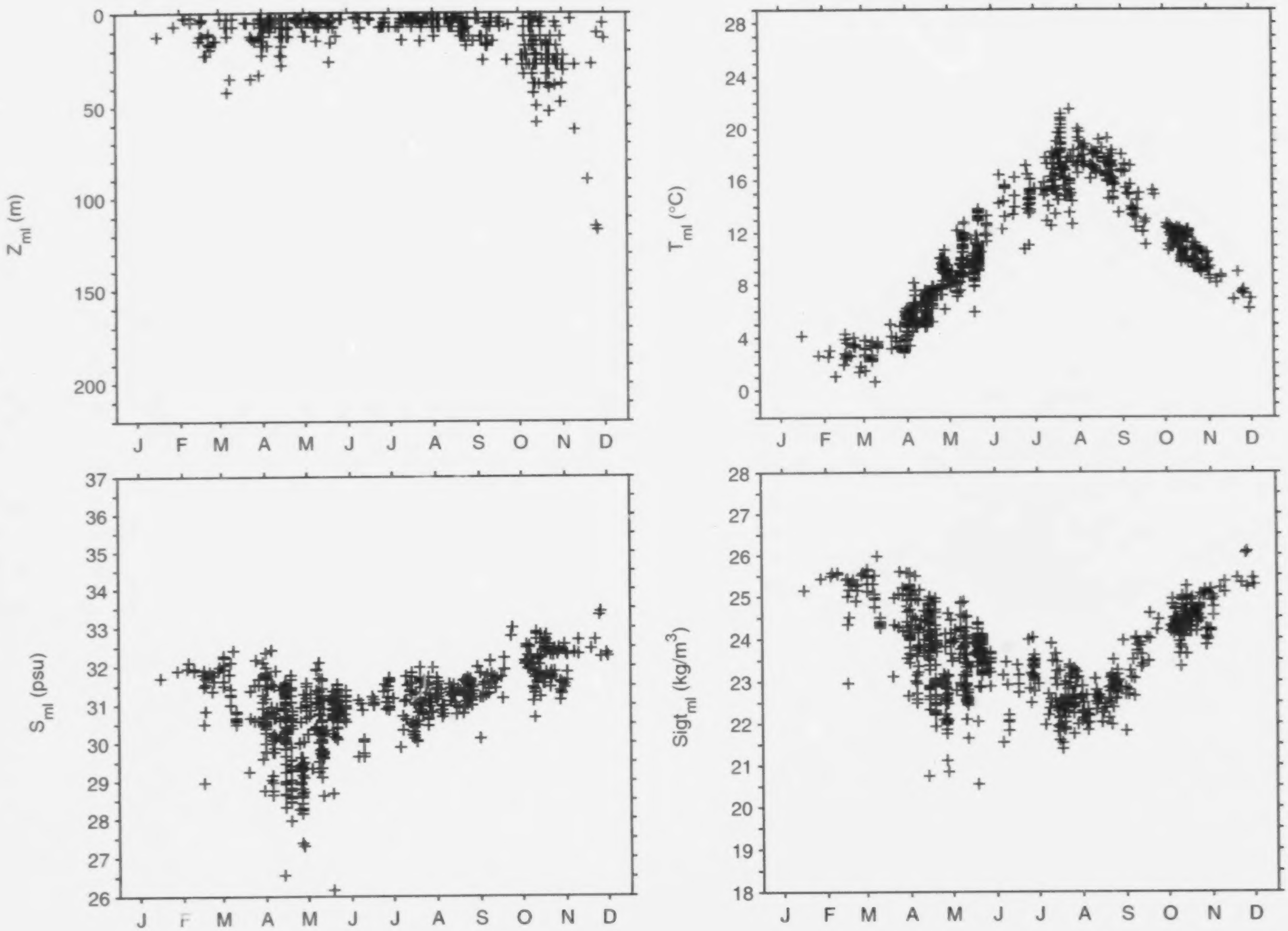

Figure 53b. Calculated mixed layer characteristics for SS50.

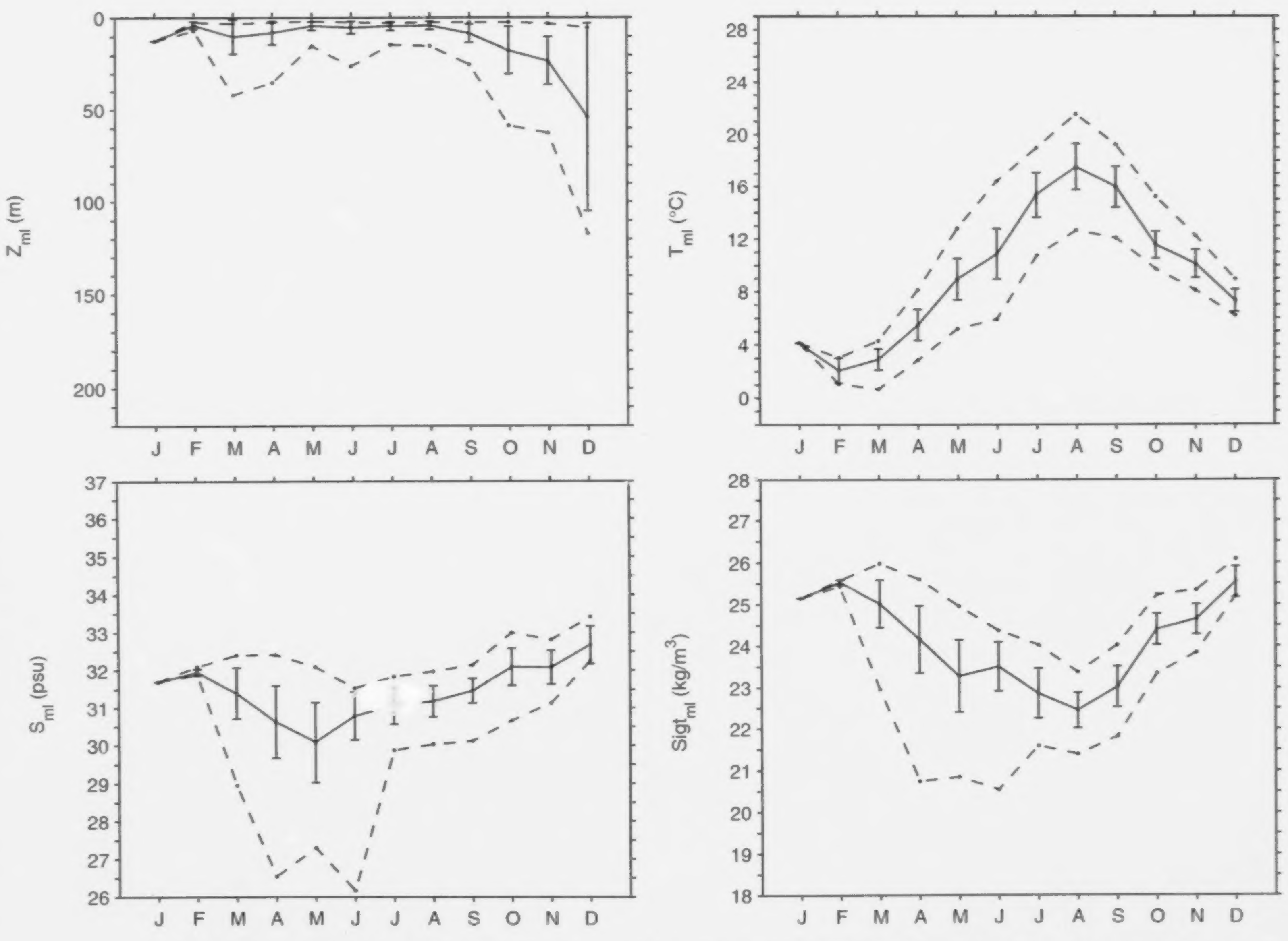

Figure 53c. Monthly statistics of mixed layer characteristics for SS50 (– : mean±sd; –– : min,max).

Table 51. Monthly statistics of mixed layer characteristics for SS50.

Profiles extracted (#) : 892 Profiles retained (#) : 718 Profiles rejected (%) : 19.5
Mean seabed depth (m) for subregion : 63.0 Mean sounding depth (m) for profiles : 51.6

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	1	5	38	129	137	99	53	77	59	66	47	7
Mixed layer depth : Z_ml (m)												
mean	12.50	4.05	10.19	8.07	4.42	5.28	4.55	4.16	8.36	17.48	23.17	54.07
median	12.50	3.00	7.50	6.50	3.55	3.60	3.25	3.25	7.50	17.50	22.50	27.00
min	12.50	2.50	3.25	2.50	2.00	2.50	3.00	2.50	2.50	2.50	3.25	5.50
max	12.50	7.00	42.00	35.00	15.00	26.00	14.50	15.00	25.00	58.50	62.50	117.00
s.d.	NaN	1.92	9.06	6.26	2.26	3.25	2.24	2.19	4.87	12.65	12.86	50.99
Mixed layer temperature : T_ml (deg.C)												
mean	4.14	2.07	2.91	5.48	8.94	10.86	15.35	17.52	15.98	11.57	10.13	7.33
median	4.14	2.54	3.17	5.43	8.90	10.28	15.30	17.37	16.27	11.73	9.98	7.30
min	4.14	1.06	0.66	2.85	5.21	5.93	10.74	12.67	12.10	9.72	8.12	6.20
max	4.14	3.04	4.30	8.13	12.80	16.38	18.98	21.52	19.25	15.23	12.27	8.96
s.d.	NaN	0.94	0.79	1.16	1.57	1.91	1.70	1.79	1.58	1.03	1.06	0.85
Mixed layer salinity : S_ml (psu)												
mean	31.70	31.95	31.40	30.64	30.10	30.80	31.08	31.19	31.47	32.09	32.08	32.68
median	31.70	31.94	31.58	30.69	30.19	30.93	31.14	31.24	31.54	32.12	32.30	32.46
min	31.70	31.89	28.96	26.55	27.30	26.16	29.89	30.04	30.12	30.67	31.13	32.25
max	31.70	32.10	32.41	32.42	32.10	31.54	31.84	31.98	32.15	33.00	32.81	33.42
s.d.	NaN	0.09	0.68	0.96	1.06	0.64	0.51	0.42	0.33	0.49	0.44	0.50
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.15	25.52	25.02	24.16	23.28	23.51	22.87	22.46	23.03	24.41	24.65	25.54
median	25.15	25.54	25.15	24.20	23.15	23.66	22.93	22.46	22.91	24.42	24.64	25.43
min	25.15	25.43	22.96	20.75	20.85	20.55	21.60	21.40	21.82	23.35	23.85	25.21
max	25.15	25.58	25.98	25.60	24.96	24.38	24.03	23.38	24.03	25.23	25.35	26.09
s.d.	NaN	0.06	0.57	0.80	0.87	0.59	0.60	0.43	0.49	0.37	0.36	0.37

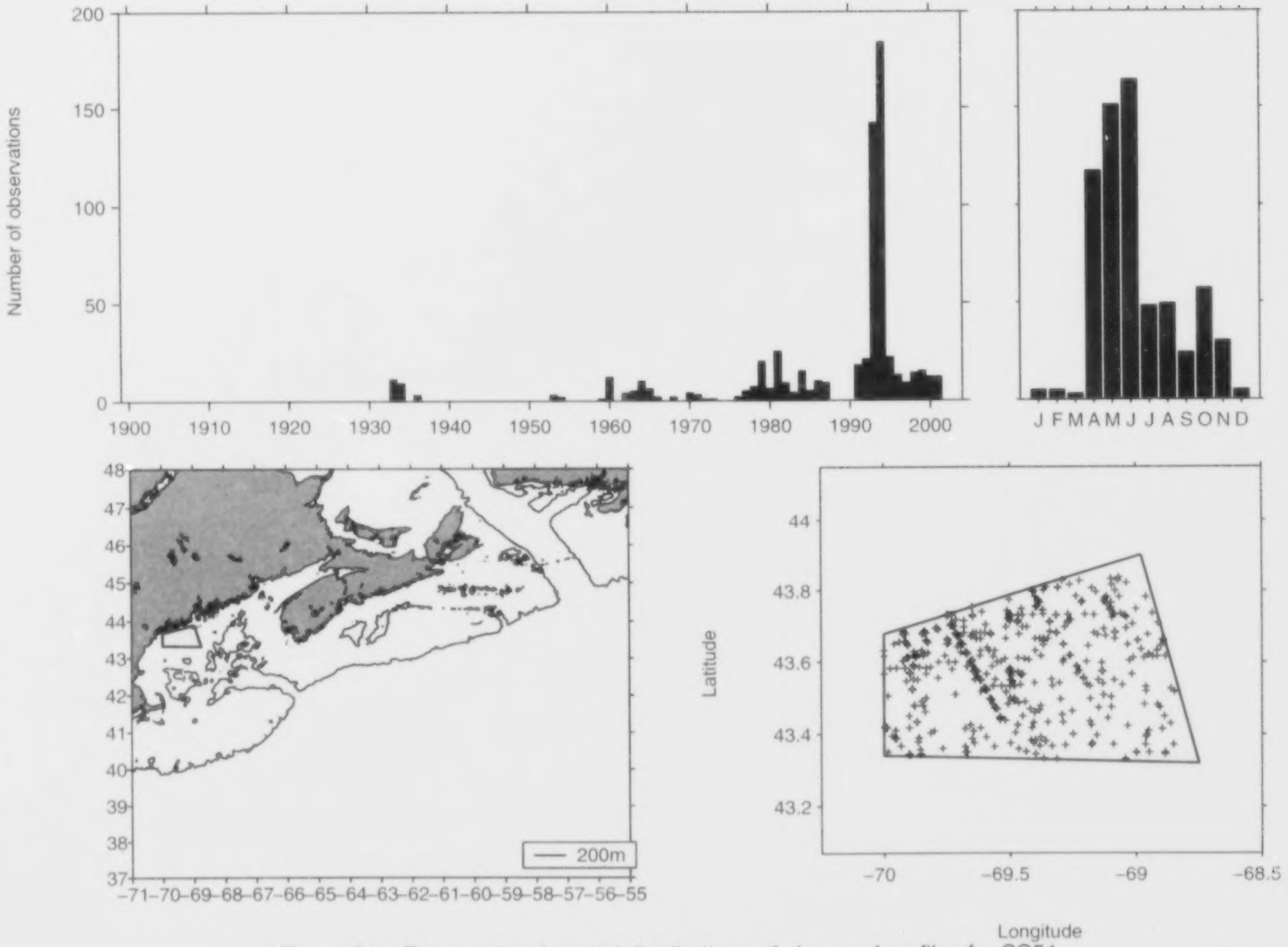

Figure 54a. Temporal and spatial distributions of observed profiles for SS51.

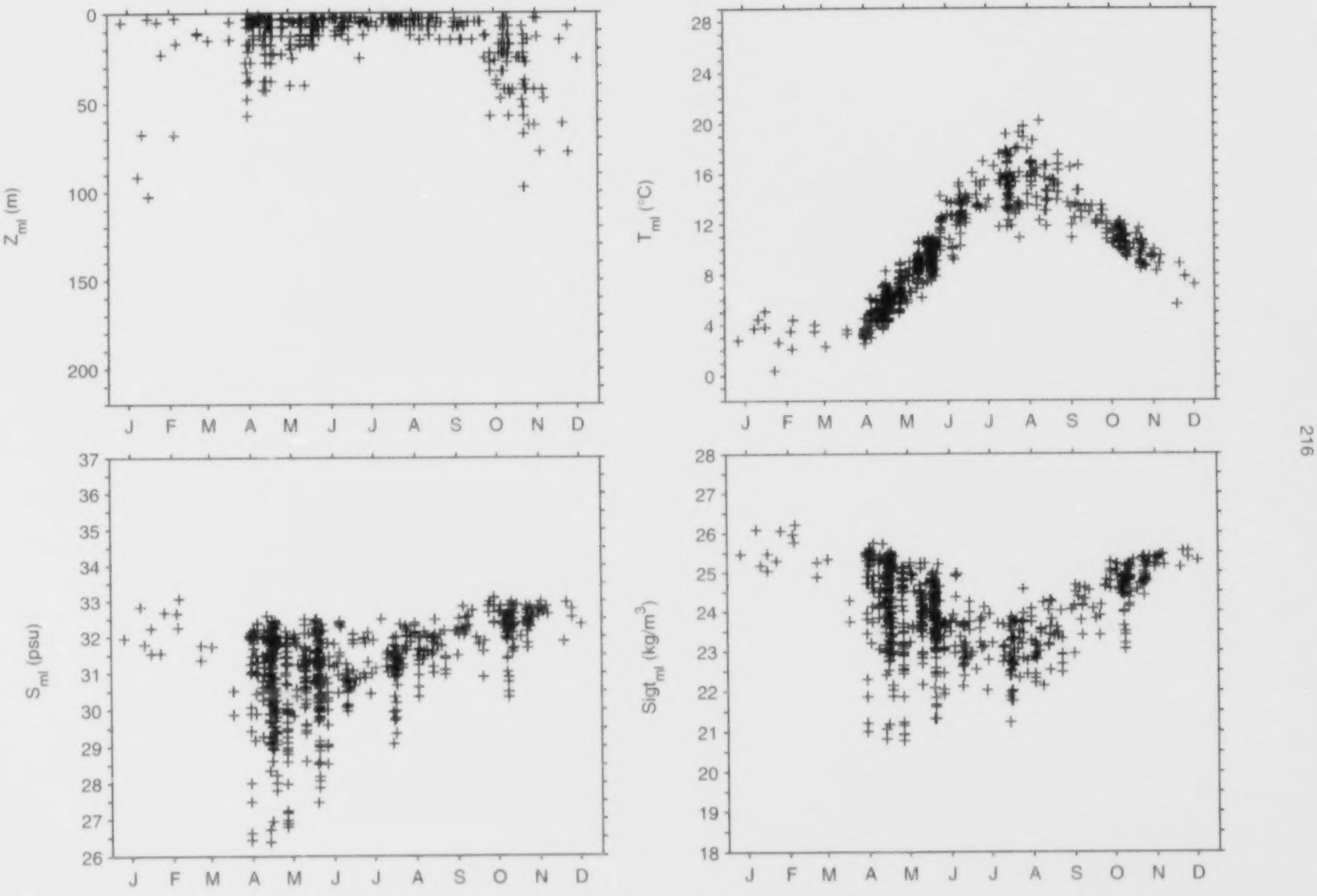

Figure 54b. Calculated mixed layer characteristics for SS51.

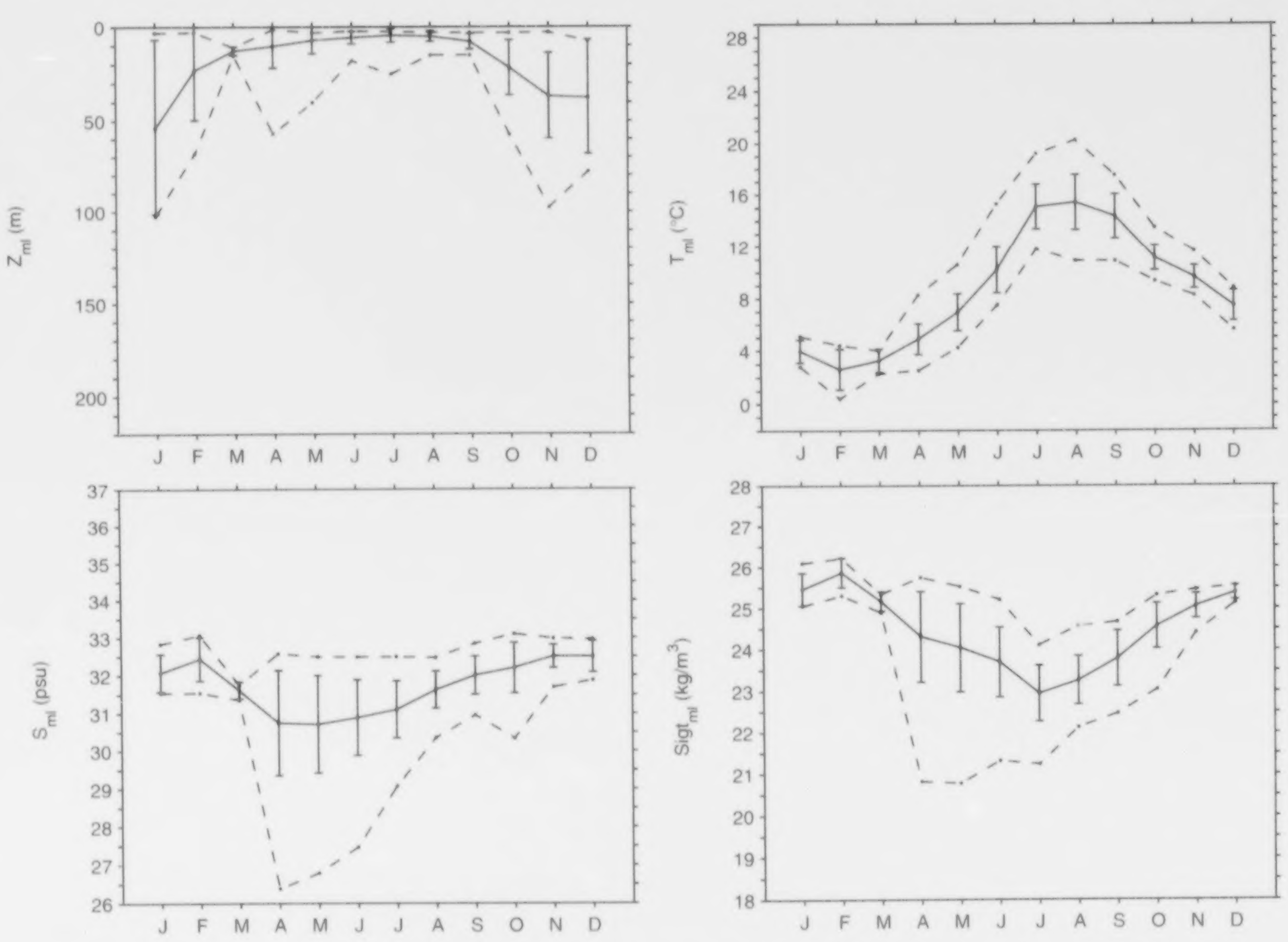

Figure 54c. Monthly statistics of mixed layer characteristics for SS51 (– : mean±sd; -- : min,max).

Table 52. Monthly statistics of mixed layer characteristics for SS51.

Profiles extracted (#) : 751   Profiles retained (#) : 658   Profiles rejected (%) : 12.4
Mean seabed depth (m) for subregion : 78.2   Mean sounding depth (m) for profiles : 69.0

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	5	5	3	117	151	163	45	53	24	57	30	5
Mixed layer depth : Z_ml (m)												
mean	54.00	23.20	12.75	10.24	7.17	5.75	4.50	5.01	7.80	21.62	36.68	37.50
median	67.50	17.00	12.00	3.80	3.60	3.80	3.25	3.25	6.50	22.50	38.62	25.50
min	3.25	3.00	11.00	1.50	3.10	2.40	2.50	3.00	3.25	3.25	3.00	7.50
max	102.50	68.00	15.25	57.00	40.00	18.00	25.00	15.00	15.00	57.50	97.50	78.00
s.d.	47.15	26.39	NaN	11.46	7.04	3.30	3.59	2.70	4.04	14.55	22.89	30.69
Mixed layer temperature : T_ml (deg.C)												
mean	3.98	2.61	3.27	4.89	6.95	10.20	15.08	15.43	14.36	11.15	9.68	7.48
median	3.81	2.63	3.50	4.99	6.60	9.86	15.21	15.53	14.26	11.09	9.48	7.81
min	2.81	0.40	2.30	2.54	4.25	7.49	11.77	10.90	10.90	9.38	8.29	5.62
max	5.08	4.41	4.00	8.28	10.59	15.29	19.16	20.24	17.52	13.52	11.66	8.86
s.d.	0.85	1.51	NaN	1.16	1.43	1.74	1.71	2.11	1.70	0.95	0.88	1.19
Mixed layer salinity : S_ml (psu)												
mean	32.07	32.44	31.62	30.75	30.72	30.89	31.11	31.63	32.01	32.21	32.51	32.50
median	31.96	32.66	31.74	31.03	31.05	30.89	31.19	31.64	32.11	32.37	32.53	32.55
min	31.54	31.55	31.36	26.38	26.79	27.47	29.08	30.36	30.96	30.34	31.70	31.88
max	32.84	33.07	31.76	32.58	32.50	32.50	32.50	32.48	32.85	33.10	32.98	32.96
s.d.	0.50	0.58	NaN	1.39	1.29	1.00	0.76	0.49	0.50	0.67	0.31	0.42
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.46	25.86	25.16	24.31	24.04	23.70	22.95	23.27	23.79	24.57	25.06	25.38
median	25.47	25.97	25.26	24.56	24.15	23.81	22.97	23.27	24.03	24.70	25.13	25.38
min	25.05	25.30	24.89	20.82	20.78	21.32	21.24	22.13	22.47	23.05	24.41	25.13
max	26.09	26.22	25.34	25.75	25.53	25.21	24.11	24.57	24.67	25.32	25.45	25.54
s.d.	0.40	0.35	NaN	1.09	1.06	0.84	0.67	0.58	0.67	0.55	0.30	0.17

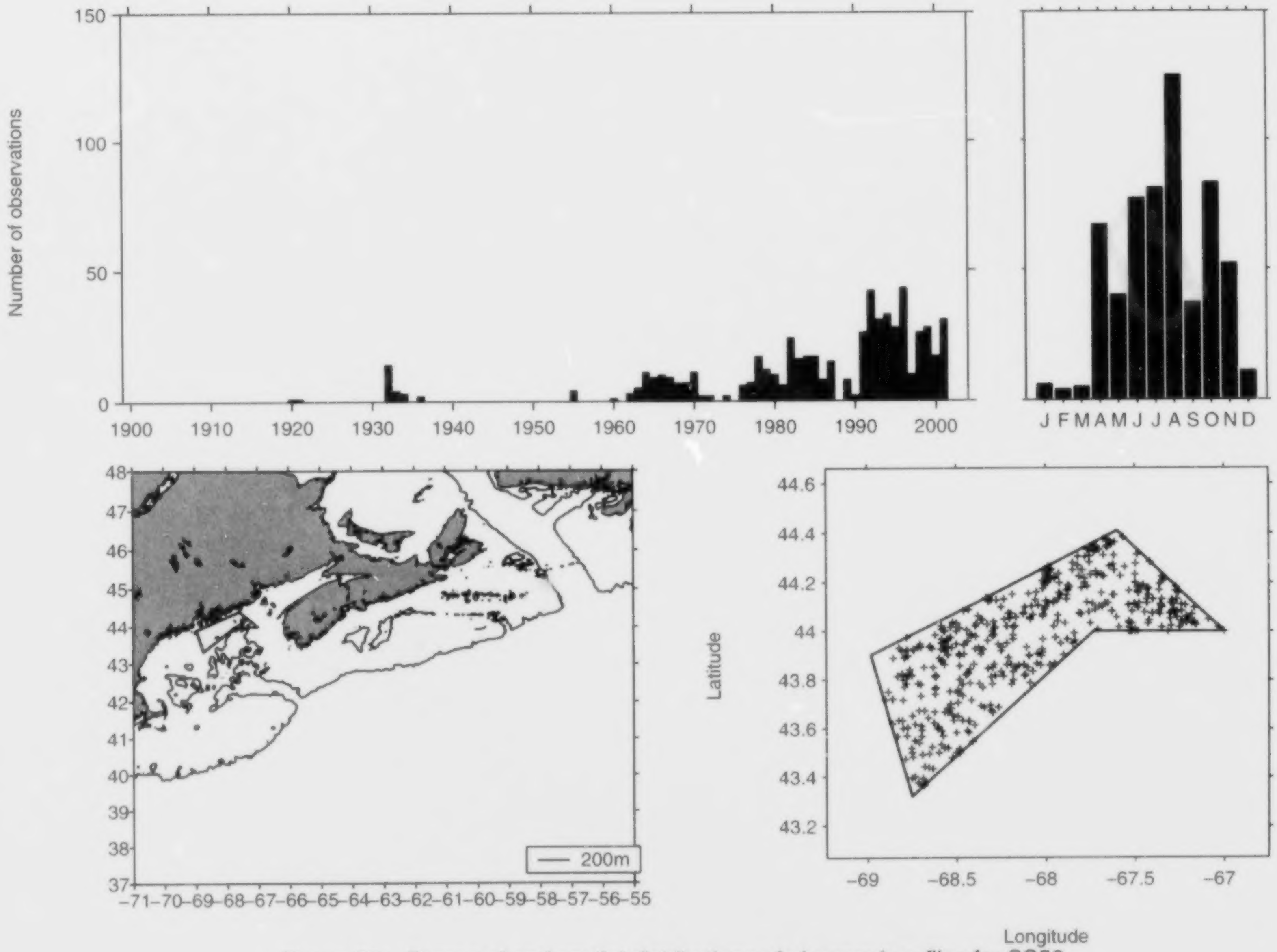

Figure 55a. Temporal and spatial distributions of observed profiles for SS52.

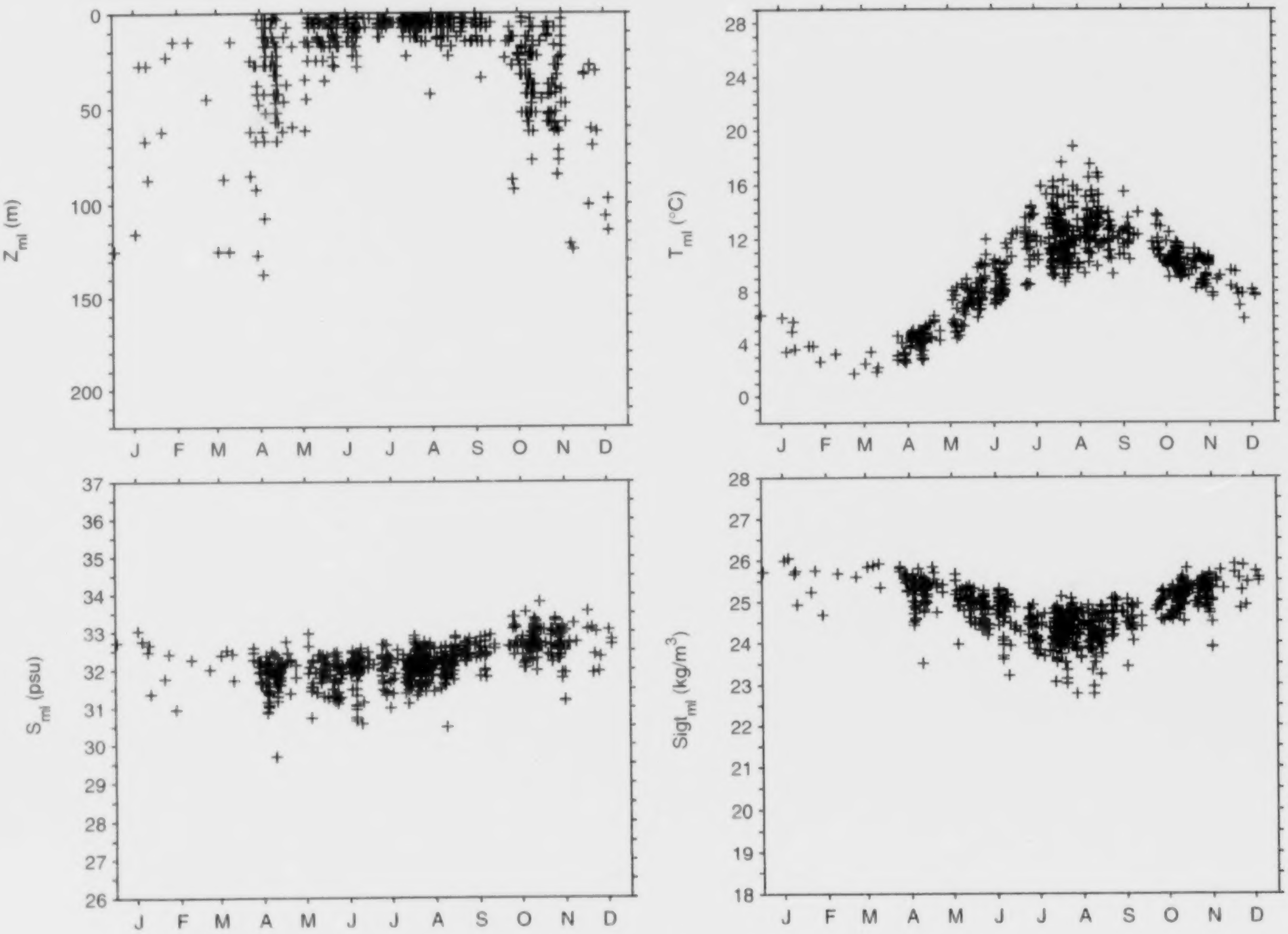

Figure 55b. Calculated mixed layer characteristics for SS52.

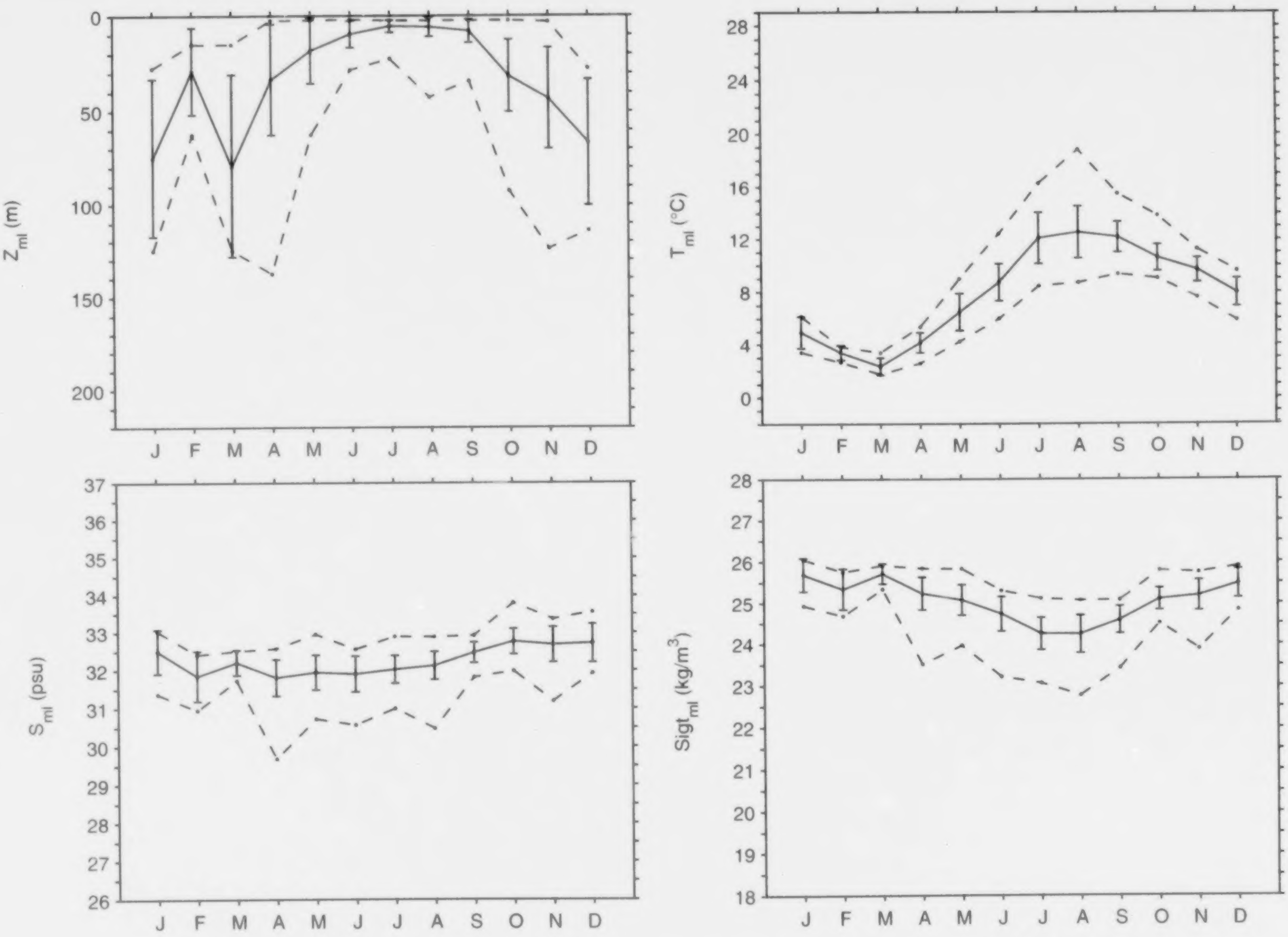

Figure 55c. Monthly statistics of mixed layer characteristics for SS52 (– : mean±sd; –– : min,max).

Table 53. Monthly statistics of mixed layer characteristics for SS52.

Profiles extracted (#) : 793 Profiles retained (#) : 588 Profiles rejected (%) : 25.9
Mean seabed depth (m) for subregion : 118.2 Mean sounding depth (m) for profiles : 126.7

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	6	4	5	67	40	77	81	125	37	83	52	11
Mixed layer depth : Z_ml (m)												
mean	75.08	28.88	79.43	33.40	18.19	9.62	5.49	5.85	7.93	31.41	43.33	66.73
median	77.50	19.00	87.15	27.50	14.25	7.50	5.00	3.25	5.50	27.50	42.75	62.50
min	27.50	15.00	15.00	2.50	2.25	2.00	2.50	2.50	2.50	2.50	3.25	27.50
max	125.00	62.50	125.00	137.50	62.50	28.25	22.50	42.50	34.00	92.50	124.00	114.00
s.d.	42.11	NaN	48.86	29.07	17.09	6.95	3.23	5.02	6.12	18.86	26.63	33.51
Mixed layer temperature : T_ml (deg.C)												
mean	4.96	3.37	2.33	4.16	6.49	8.72	12.08	12.53	12.17	10.60	9.69	7.99
median	5.29	3.52	2.20	4.41	6.55	8.65	12.03	12.38	12.18	10.48	10.08	7.87
min	3.40	2.65	1.74	2.56	4.23	5.99	8.45	8.71	9.35	9.04	7.63	5.90
max	6.17	3.82	3.37	5.35	8.97	12.40	16.25	18.80	15.50	13.84	11.25	9.61
s.d.	1.21	NaN	0.65	0.76	1.40	1.38	1.97	2.00	1.18	1.01	0.92	1.05
Mixed layer salinity : S_ml (psu)												
mean	32.50	31.85	32.21	31.81	31.96	31.91	32.03	32.13	32.47	32.76	32.68	32.72
median	32.69	32.02	32.39	31.93	31.98	32.07	32.08	32.20	32.45	32.73	32.71	32.80
min	31.37	30.95	31.73	29.69	30.73	30.57	31.00	30.48	31.82	31.98	31.19	31.92
max	33.03	32.41	32.51	32.58	32.96	32.56	32.90	32.89	32.92	33.81	33.37	33.56
s.d.	0.58	NaN	0.33	0.48	0.46	0.47	0.36	0.37	0.27	0.34	0.47	0.51
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.69	25.34	25.71	25.23	25.08	24.73	24.25	24.24	24.59	25.10	25.19	25.48
median	25.73	25.46	25.84	25.33	25.08	24.87	24.24	24.30	24.61	25.14	25.29	25.56
min	24.93	24.68	25.34	23.51	23.96	23.21	23.06	22.77	23.43	24.51	23.88	24.83
max	26.05	25.75	25.91	25.84	25.83	25.31	25.12	25.07	25.08	25.80	25.75	25.89
s.d.	0.40	NaN	0.24	0.40	0.37	0.43	0.39	0.46	0.33	0.27	0.37	0.35

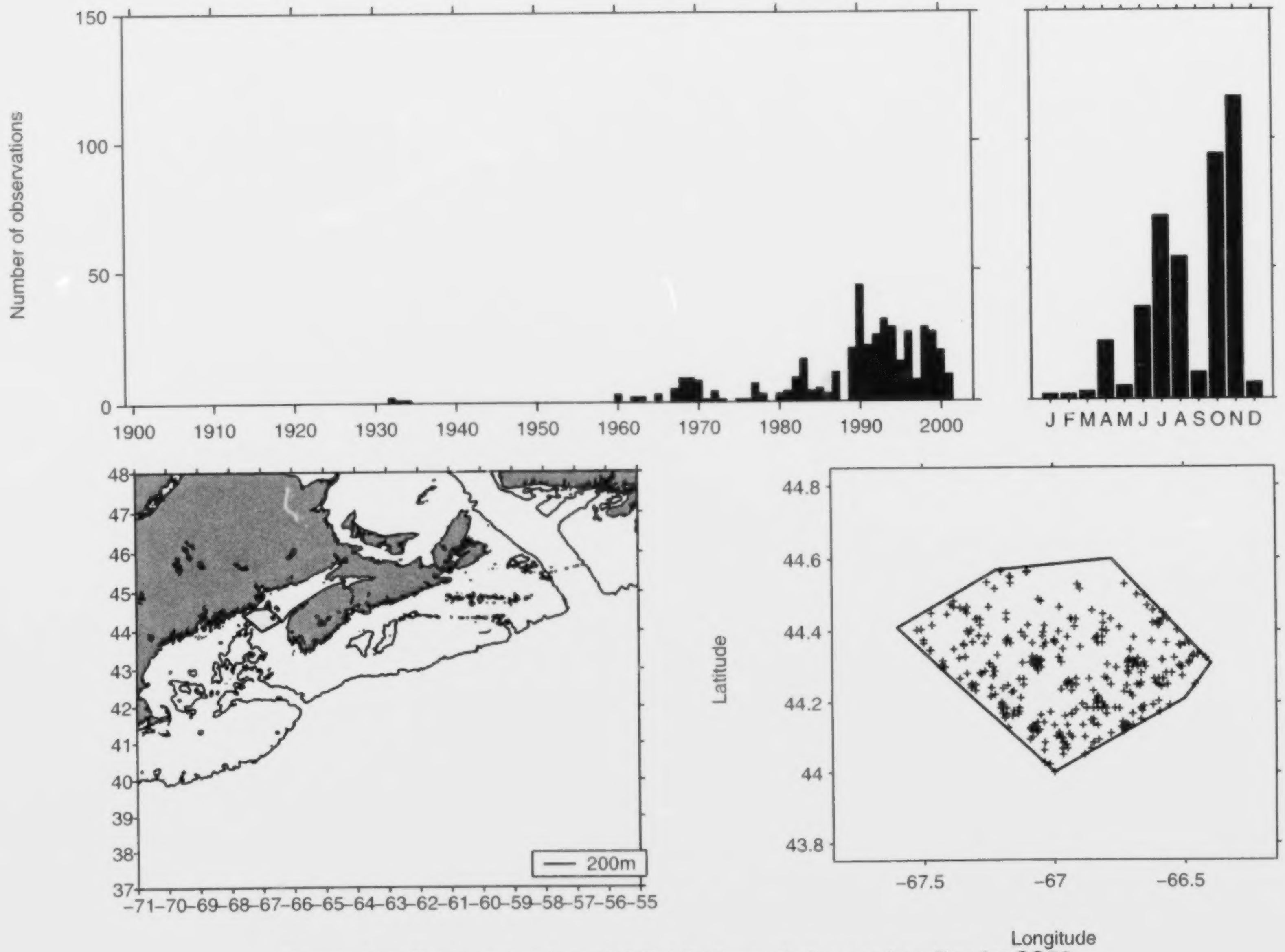

Figure 56a. Temporal and spatial distributions of observed profiles for SS53.

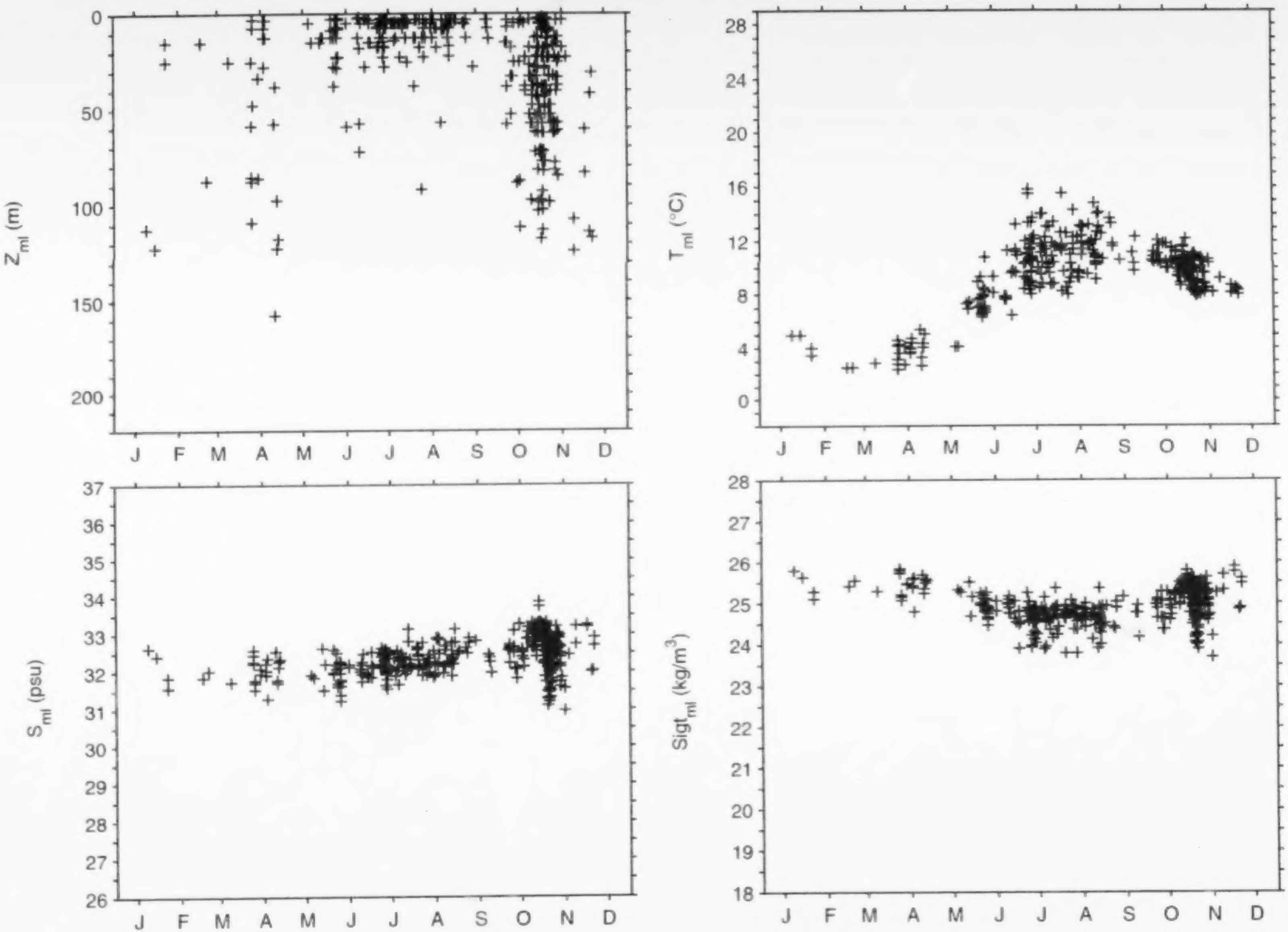

Figure 56b. Calculated mixed layer characteristics for SS53.

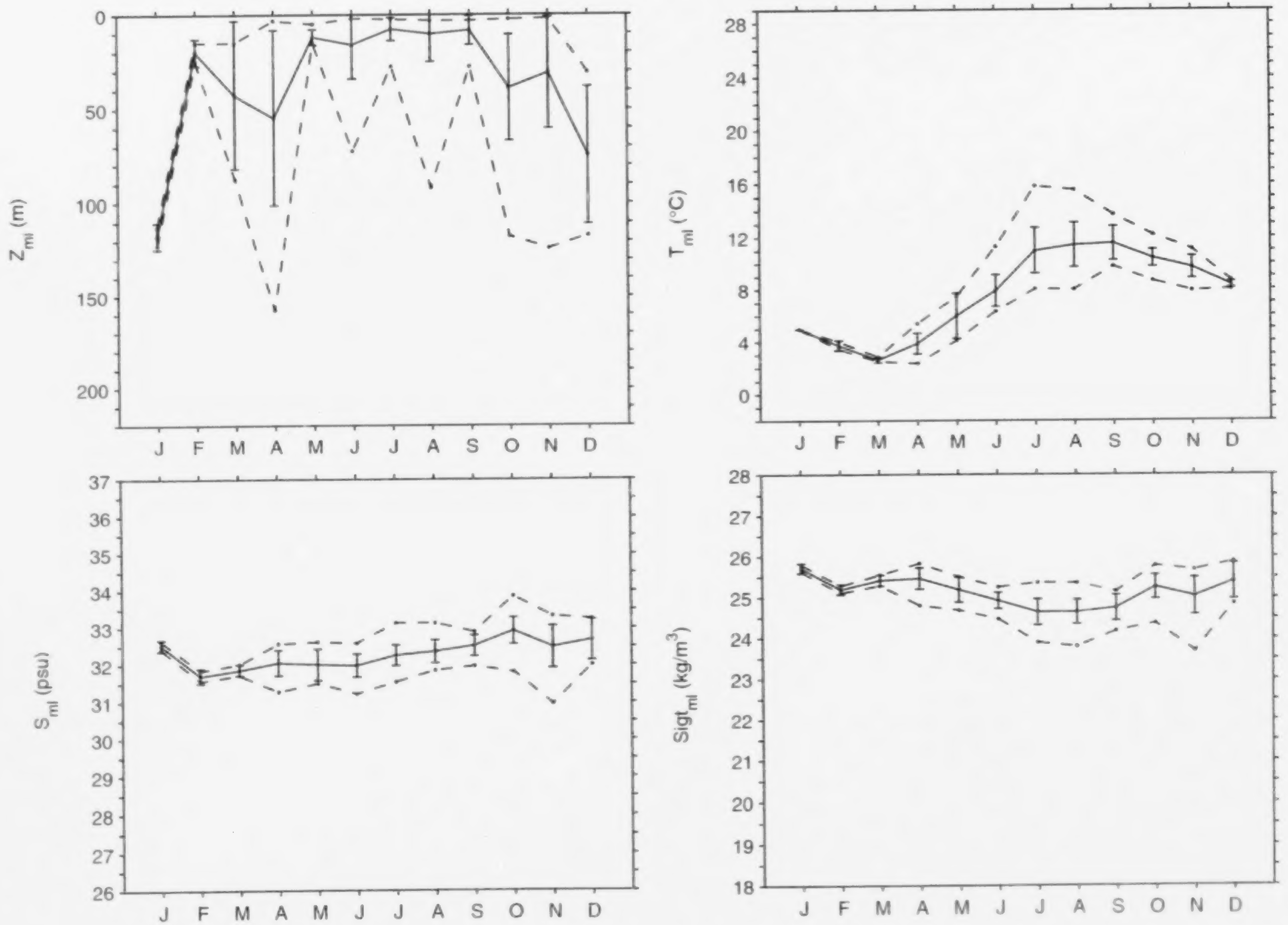

Figure 56c. Monthly statistics of mixed layer characteristics for SS53 (– : mean±sd; –– : min,max).

Table 54. Monthly statistics of mixed layer characteristics for SS53.

Profiles extracted (#) : 617 Profiles retained (#) : 419 Profiles rejected (%) : 32.1
Mean seabed depth (m) for subregion : 121.8 Mean sounding depth (m) for profiles : 130.1

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	2	2	3	22	5	33	72	54	10	86	124	6
Mixed layer depth : Z_ml (m)												
mean	117.50	20.00	42.50	54.57	12.00	16.06	7.75	10.36	8.38	38.78	30.84	74.50
median	117.50	20.00	25.00	42.62	12.50	8.00	5.00	7.50	5.15	32.50	22.50	72.00
min	112.50	15.00	15.00	3.25	5.00	2.00	2.50	3.15	3.25	2.50	2.00	30.50
max	122.50	25.00	87.50	157.50	15.00	72.50	27.50	92.00	27.50	117.50	124.00	117.00
s.d.	NaN	NaN	NaN	46.43	4.11	17.88	6.18	14.61	7.68	28.07	29.51	36.52
Mixed layer temperature : T_ml (deg.C)												
mean	4.98	3.73	2.62	3.87	5.98	7.91	10.98	11.41	11.54	10.41	9.70	8.34
median	4.98	3.73	2.52	4.03	6.93	7.72	10.84	11.54	11.39	10.30	9.92	8.34
min	4.98	3.46	2.50	2.35	4.10	6.32	8.03	8.01	9.77	8.66	7.90	8.01
max	4.98	4.00	2.85	5.39	7.45	11.30	15.80	15.52	13.70	12.20	11.10	8.68
s.d.	NaN	NaN	NaN	0.79	1.73	1.22	1.74	1.70	1.29	0.66	0.85	0.25
Mixed layer salinity : S_ml (psu)												
mean	32.52	31.70	31.87	32.07	32.02	31.99	32.27	32.37	32.53	32.92	32.49	32.68
median	32.52	31.70	31.85	32.10	31.91	32.00	32.30	32.30	32.52	33.04	32.62	32.80
min	32.42	31.56	31.73	31.29	31.51	31.23	31.55	31.86	31.98	31.81	30.96	32.01
max	32.63	31.84	32.02	32.58	32.62	32.59	33.14	33.14	32.90	33.86	33.32	33.25
s.d.	NaN	NaN	NaN	0.34	0.42	0.31	0.28	0.31	0.28	0.36	0.57	0.55
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.71	25.19	25.41	25.46	25.19	24.92	24.64	24.64	24.75	25.26	25.04	25.40
median	25.71	25.19	25.41	25.48	25.27	24.93	24.70	24.70	24.83	25.34	25.08	25.53
min	25.63	25.11	25.29	24.80	24.68	24.46	23.89	23.79	24.18	24.37	23.69	24.85
max	25.80	25.28	25.55	25.83	25.51	25.25	25.36	25.35	25.15	25.79	25.68	25.88
s.d.	NaN	NaN	NaN	0.26	0.31	0.20	0.32	0.30	0.32	0.30	0.45	0.44

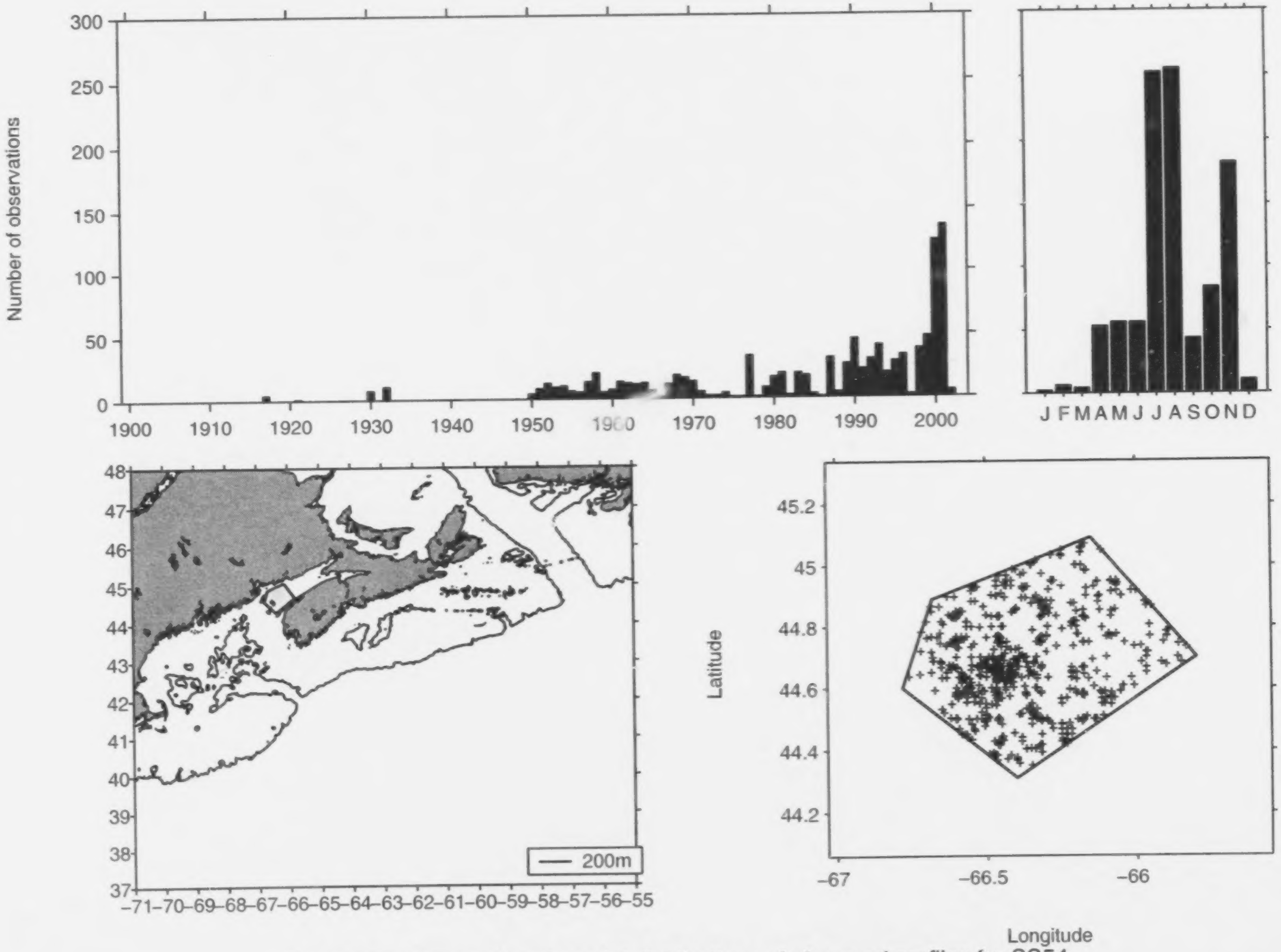

Figure 57a. Temporal and spatial distributions of observed profiles for SS54.

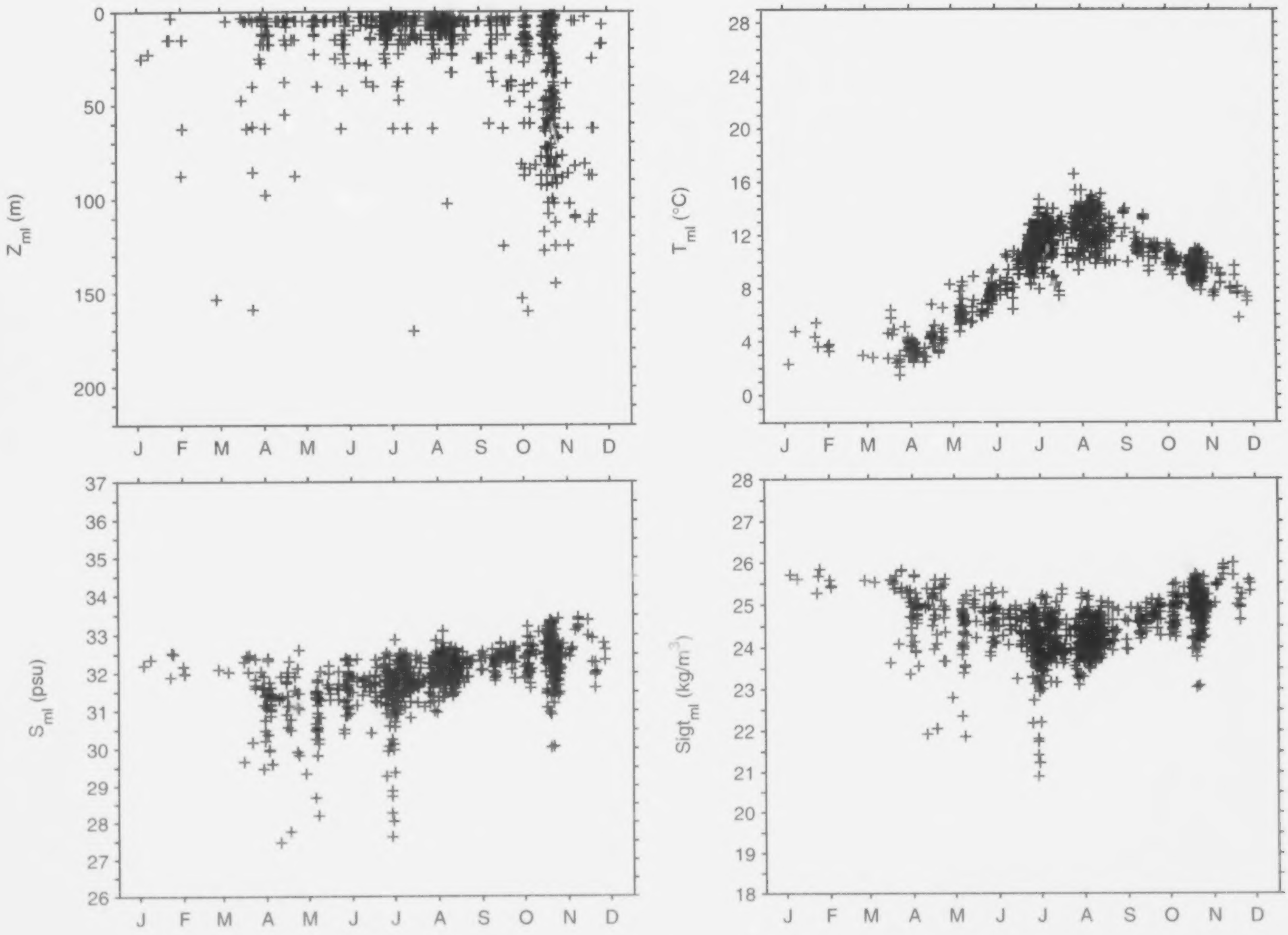

Figure 57b. Calculated mixed layer characteristics for SS54.

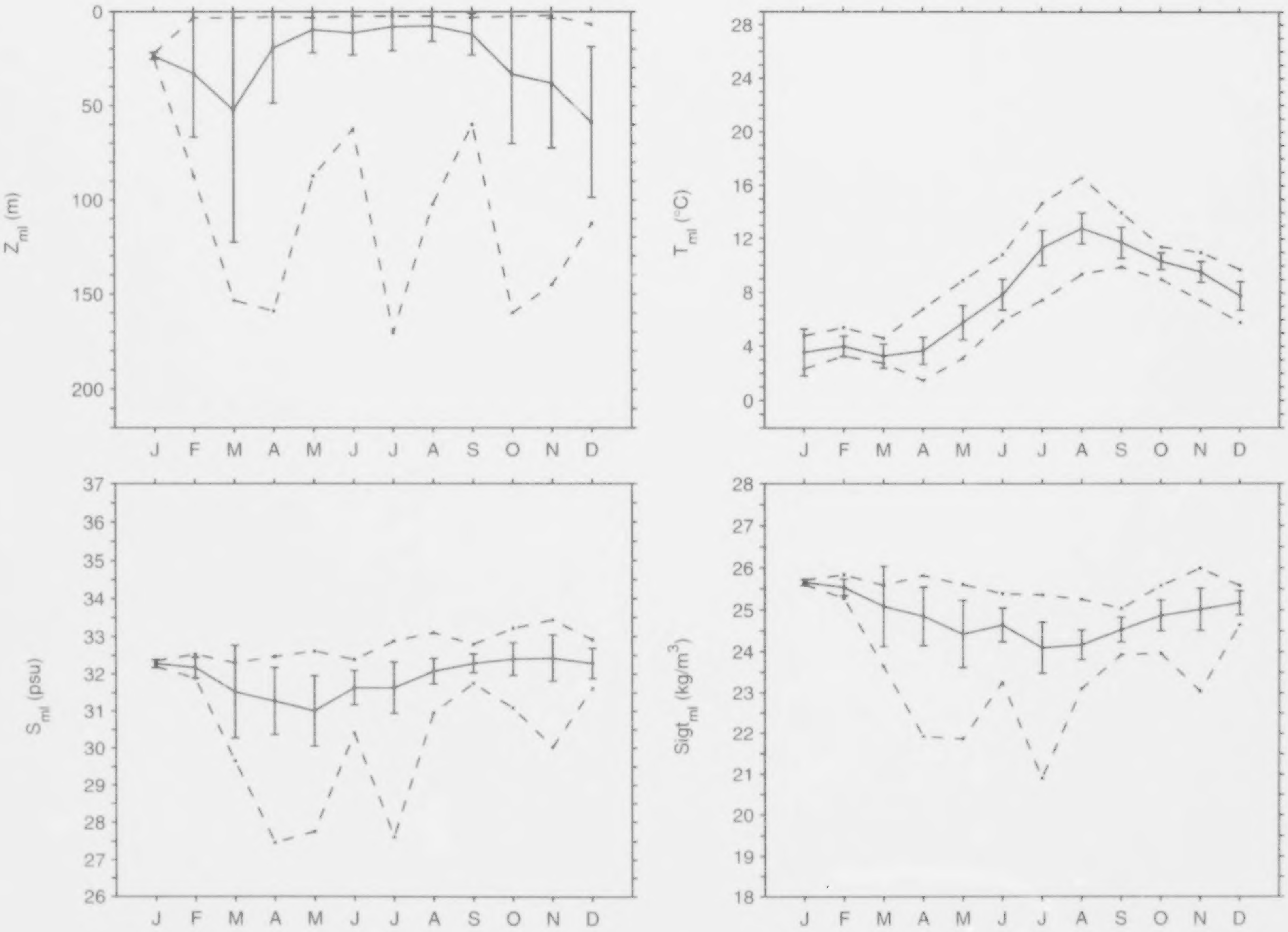

Figure 57c. Monthly statistics of mixed layer characteristics for SS54 (– : mean±sd; -- : min,max).

Table 55. Monthly statistics of mixed layer characteristics for SS54.

Profiles extracted (#) : 1321   Profiles retained (#) : 1002   Profiles rejected (%) : 24.1
Mean seabed depth (m) for subregion : 119.7   Mean sounding depth (m) for profiles : 144.5

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	2	6	4	53	56	54	254	255	43	81	184	10
Mixed layer depth : Z_ml (m)												
mean	23.75	33.08	52.36	19.67	9.85	11.58	8.17	7.67	12.15	33.35	38.06	58.75
median	23.75	15.00	26.25	7.45	5.25	7.50	5.00	7.50	7.50	15.00	28.25	62.50
min	22.50	3.50	3.45	2.90	3.40	2.50	2.50	2.50	3.25	2.50	2.00	6.90
max	25.00	87.50	153.50	159.00	87.50	62.50	170.50	102.35	60.00	160.00	145.00	112.50
s.d.	NaN	33.71	NaN	29.07	12.29	11.71	12.90	8.26	11.13	36.78	34.31	39.88
Mixed layer temperature : T_ml (deg.C)												
mean	3.54	4.00	3.28	3.67	5.76	7.85	11.32	12.79	11.74	10.34	9.56	7.78
median	3.54	3.68	2.88	3.53	5.80	7.79	11.34	12.99	11.45	10.35	9.73	7.69
min	2.32	3.28	2.75	1.48	3.13	5.90	7.45	9.37	9.90	9.01	7.42	5.78
max	4.76	5.40	4.59	6.78	8.90	10.79	14.69	16.60	14.00	11.40	10.98	9.71
s.d.	NaN	0.77	NaN	0.99	1.28	1.14	1.32	1.17	1.17	0.61	0.77	1.06
Mixed layer salinity : S_ml (psu)												
mean	32.28	32.18	31.52	31.27	31.01	31.63	31.63	32.08	32.29	32.40	32.43	32.29
median	32.28	32.08	32.06	31.39	31.30	31.71	31.73	32.07	32.31	32.45	32.51	32.29
min	32.20	31.89	29.66	27.47	27.76	30.41	27.62	30.96	31.75	31.09	30.03	31.61
max	32.36	32.53	32.30	32.47	32.61	32.39	32.88	33.10	32.80	33.22	33.44	32.92
s.d.	NaN	0.28	NaN	0.91	0.95	0.46	0.69	0.34	0.25	0.44	0.61	0.40
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.66	25.54	25.08	24.85	24.42	24.64	24.09	24.17	24.53	24.87	25.01	25.17
median	25.66	25.51	25.55	24.96	24.63	24.69	24.14	24.13	24.58	24.90	25.08	25.18
min	25.61	25.27	23.64	21.92	21.86	23.25	20.90	23.10	23.93	23.96	23.04	24.65
max	25.71	25.84	25.58	25.82	25.60	25.39	25.36	25.26	25.04	25.58	25.99	25.58
s.d.	NaN	0.20	NaN	0.70	0.81	0.41	0.61	0.36	0.29	0.37	0.50	0.29

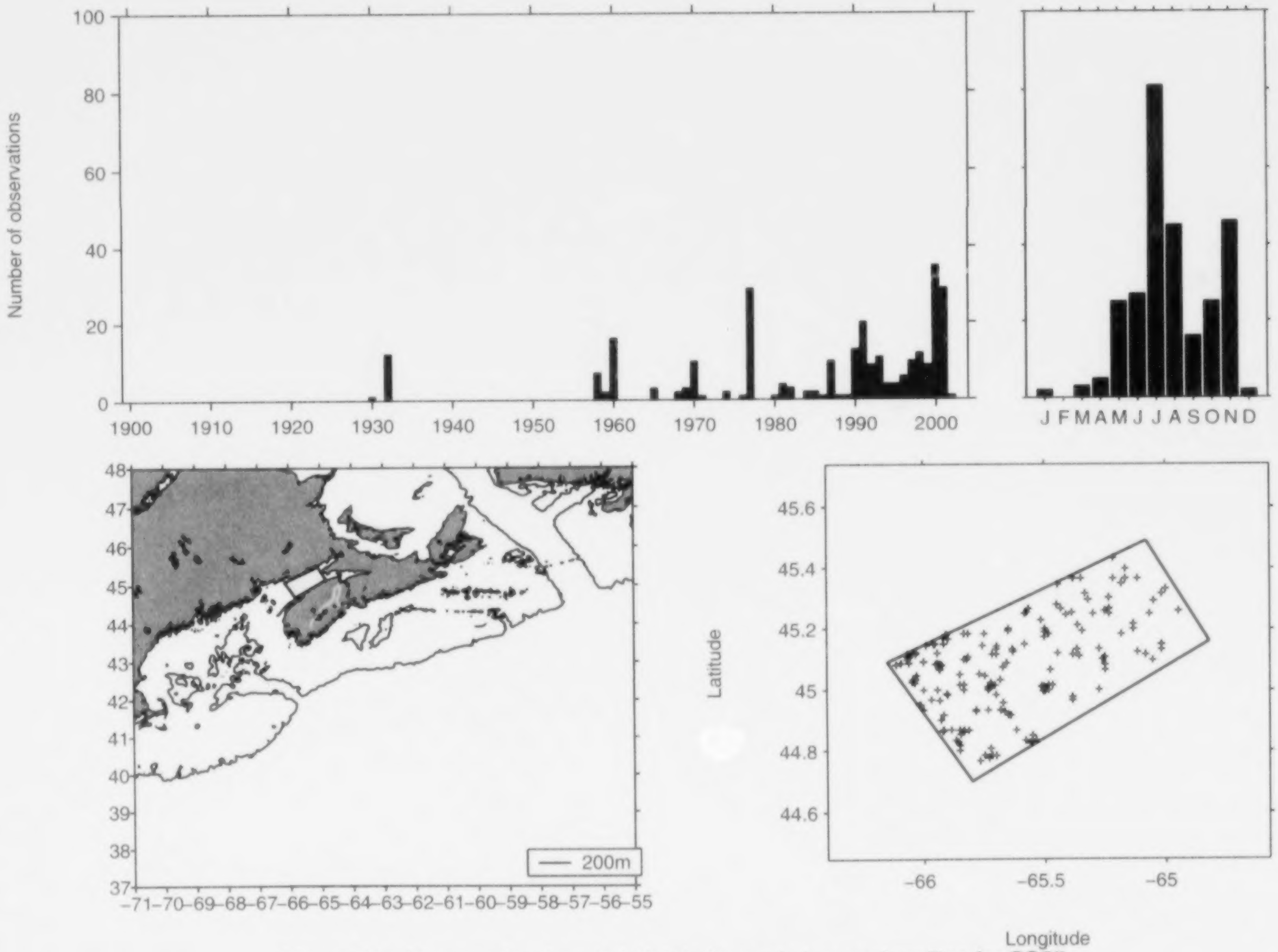

Figure 58a. Temporal and spatial distributions of observed profiles for SS55.

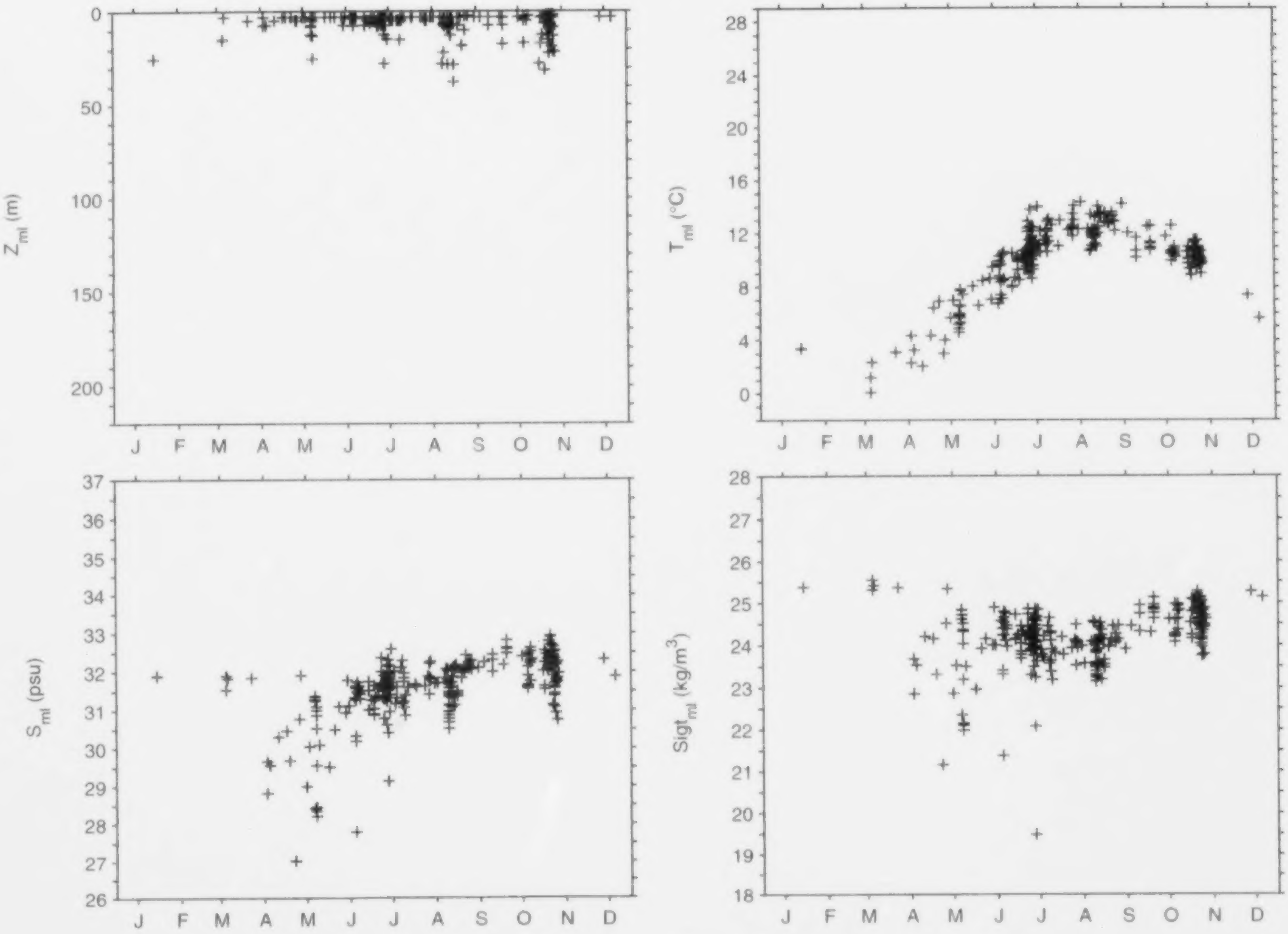

Figure 58b. Calculated mixed layer characteristics for SS55.

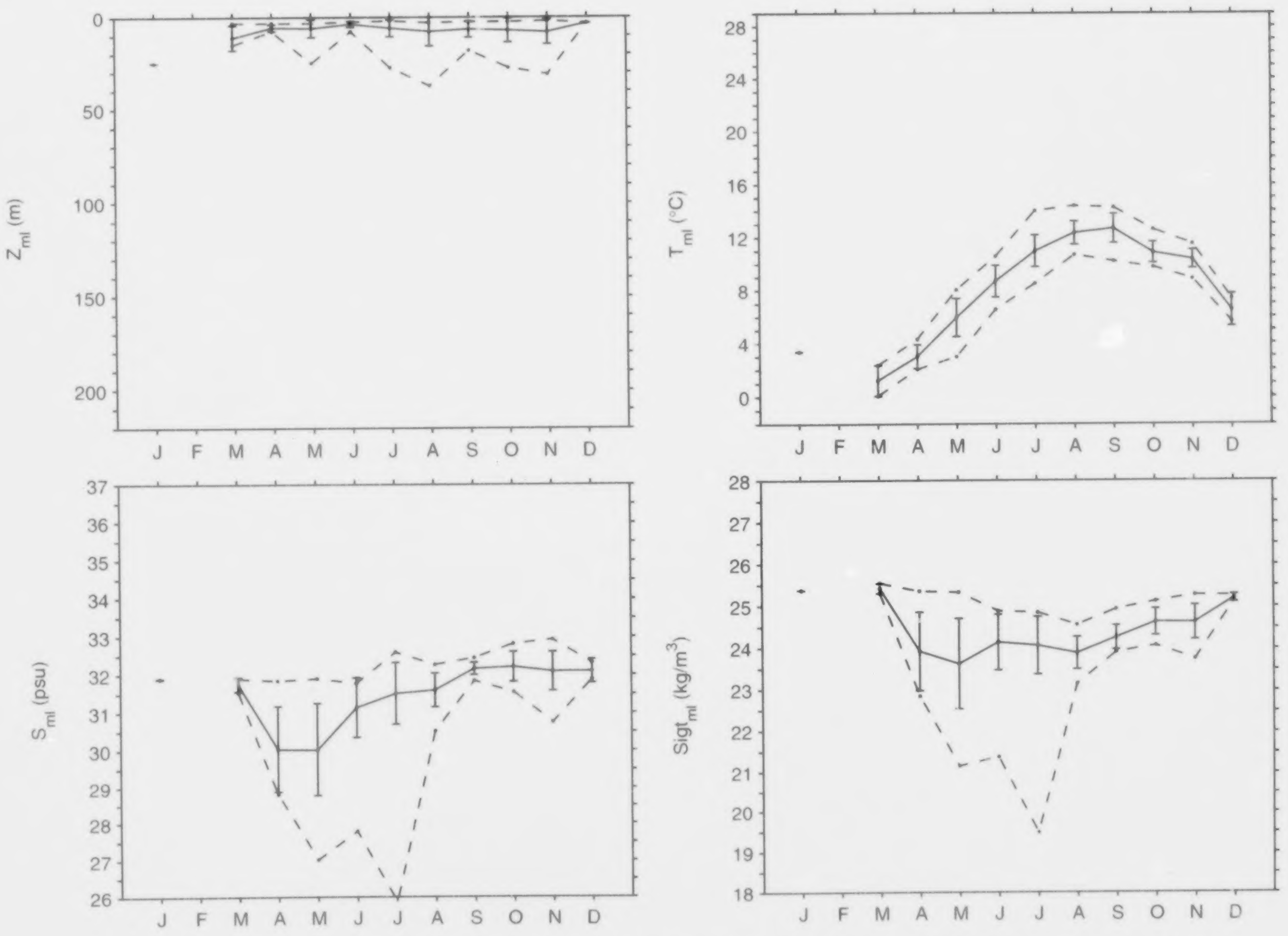

Figure 58c. Monthly statistics of mixed layer characteristics for SS55 (– : mean±sd; –– : min,max).

Table 56. Monthly statistics of mixed layer characteristics for SS55.

Profiles extracted (#) : 615 Profiles retained (#) : 277 Profiles rejected (%) : 55.0
Mean seabed depth (m) for subregion : 61.2 Mean sounding depth (m) for profiles : 71.9

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	2	0	3	5	25	27	80	46	16	25	46	2
Mixed layer depth : Z_ml (m)												
mean	25.00	NaN	11.05	5.66	6.01	3.78	5.90	7.68	6.52	7.06	8.02	3.27
median	25.00	NaN	14.90	5.00	5.00	3.25	5.00	5.00	5.38	4.25	6.75	3.27
min	25.00	NaN	3.25	3.25	3.25	2.50	2.00	3.00	2.50	2.50	2.00	3.25
max	25.00	NaN	15.00	7.65	25.00	7.80	27.50	37.40	18.00	27.50	31.00	3.30
s.d.	NaN	NaN	NaN	1.85	4.80	1.48	4.60	7.84	4.36	6.52	6.56	NaN
Mixed layer temperature : T_ml (deg.C)												
mean	3.37	NaN	1.21	3.01	5.96	8.69	10.97	12.34	12.67	10.87	10.36	6.51
median	3.37	NaN	1.20	3.10	5.96	8.60	10.83	12.09	12.89	10.70	10.42	6.51
min	3.36	NaN	0.08	2.05	3.00	6.58	8.52	10.69	10.21	9.76	8.88	5.64
max	3.37	NaN	2.35	4.32	8.04	10.59	14.00	14.38	14.26	12.60	11.52	7.38
s.d.	NaN	NaN	NaN	0.89	1.44	1.20	1.19	0.88	1.08	0.78	0.70	NaN
Mixed layer salinity : S_ml (psu)												
mean	31.90	NaN	31.76	30.04	30.03	31.14	31.52	31.60	32.16	32.21	32.09	32.10
median	31.90	NaN	31.83	29.66	30.09	31.33	31.66	31.63	32.14	32.30	32.20	32.10
min	31.89	NaN	31.54	28.82	27.02	27.79	25.87	30.52	31.84	31.55	30.75	31.88
max	31.90	NaN	31.90	31.85	31.91	31.79	32.60	32.27	32.45	32.82	32.93	32.32
s.d.	NaN	NaN	NaN	1.14	1.23	0.79	0.81	0.45	0.16	0.39	0.51	NaN
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.38	NaN	25.42	23.92	23.62	24.14	24.06	23.88	24.26	24.63	24.62	25.20
median	25.38	NaN	25.41	23.68	23.52	24.23	24.13	23.94	24.14	24.62	24.70	25.20
min	25.38	NaN	25.31	22.85	21.16	21.38	19.48	23.15	23.91	24.07	23.75	25.13
max	25.38	NaN	25.55	25.36	25.33	24.88	24.85	24.56	24.94	25.12	25.27	25.26
s.d.	NaN	NaN	NaN	0.94	1.08	0.67	0.69	0.39	0.29	0.32	0.41	NaN

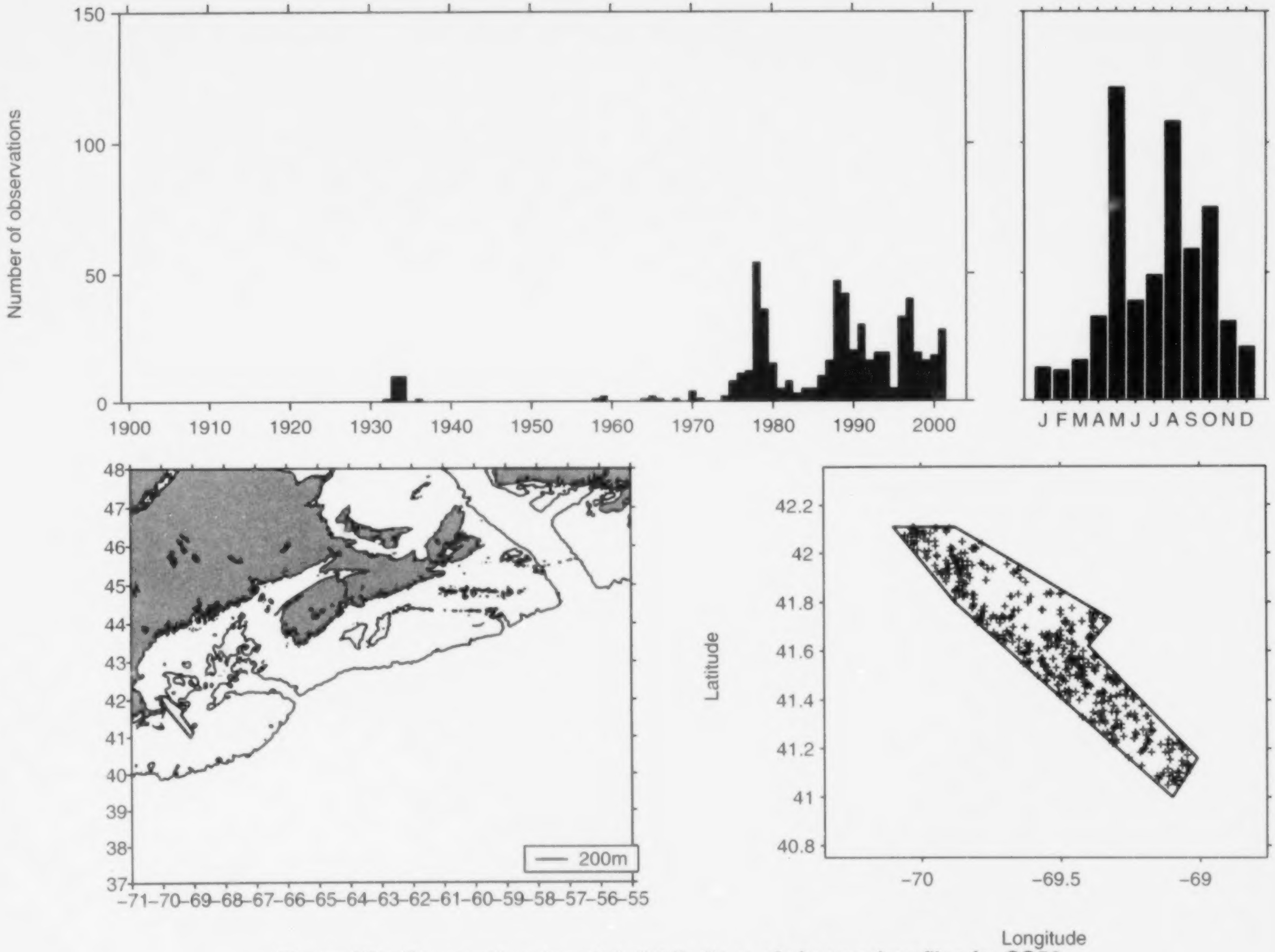

Figure 59a. Temporal and spatial distributions of observed profiles for SS56.

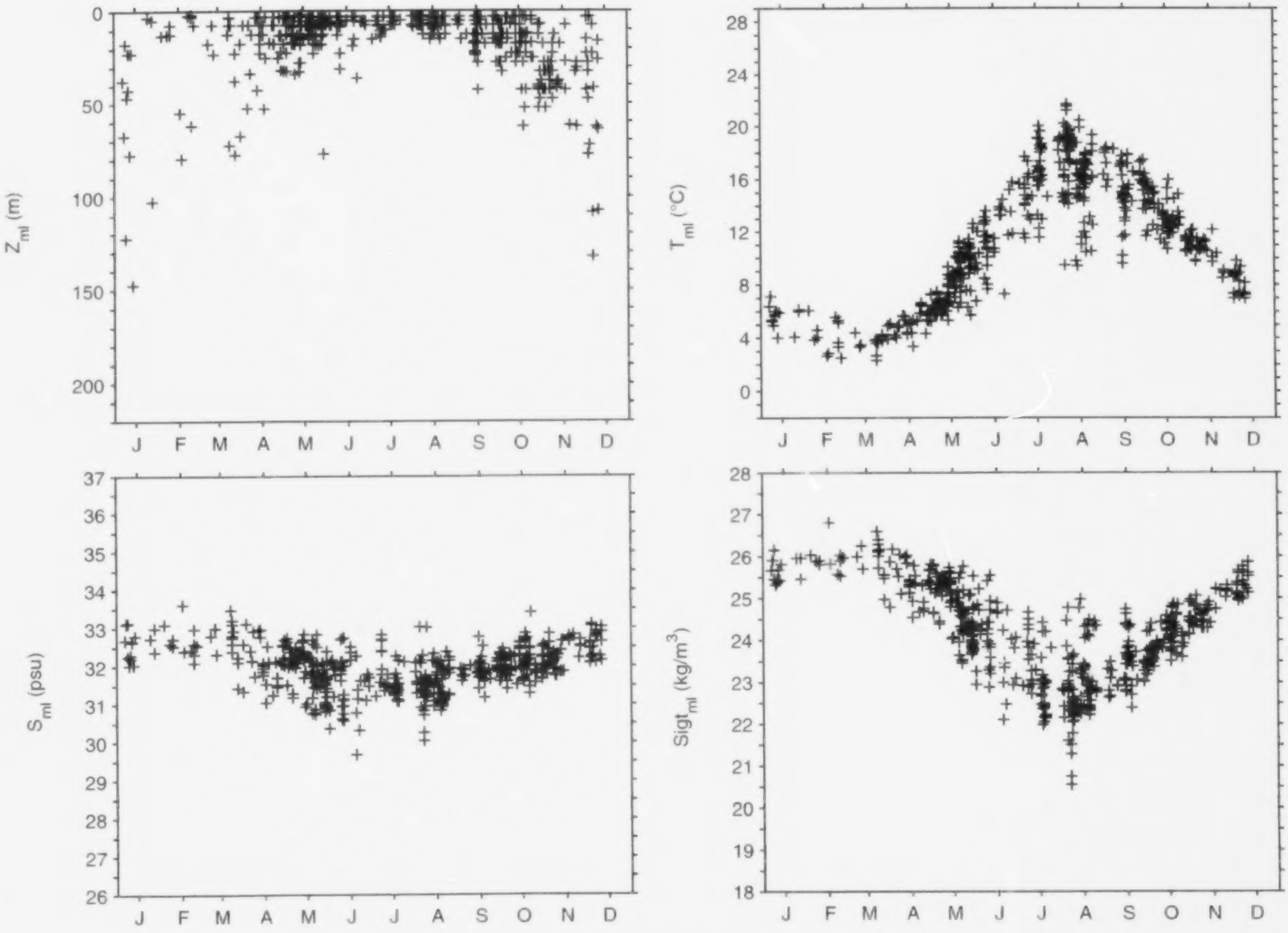

Figure 59b. Calculated mixed layer characteristics for SS56.

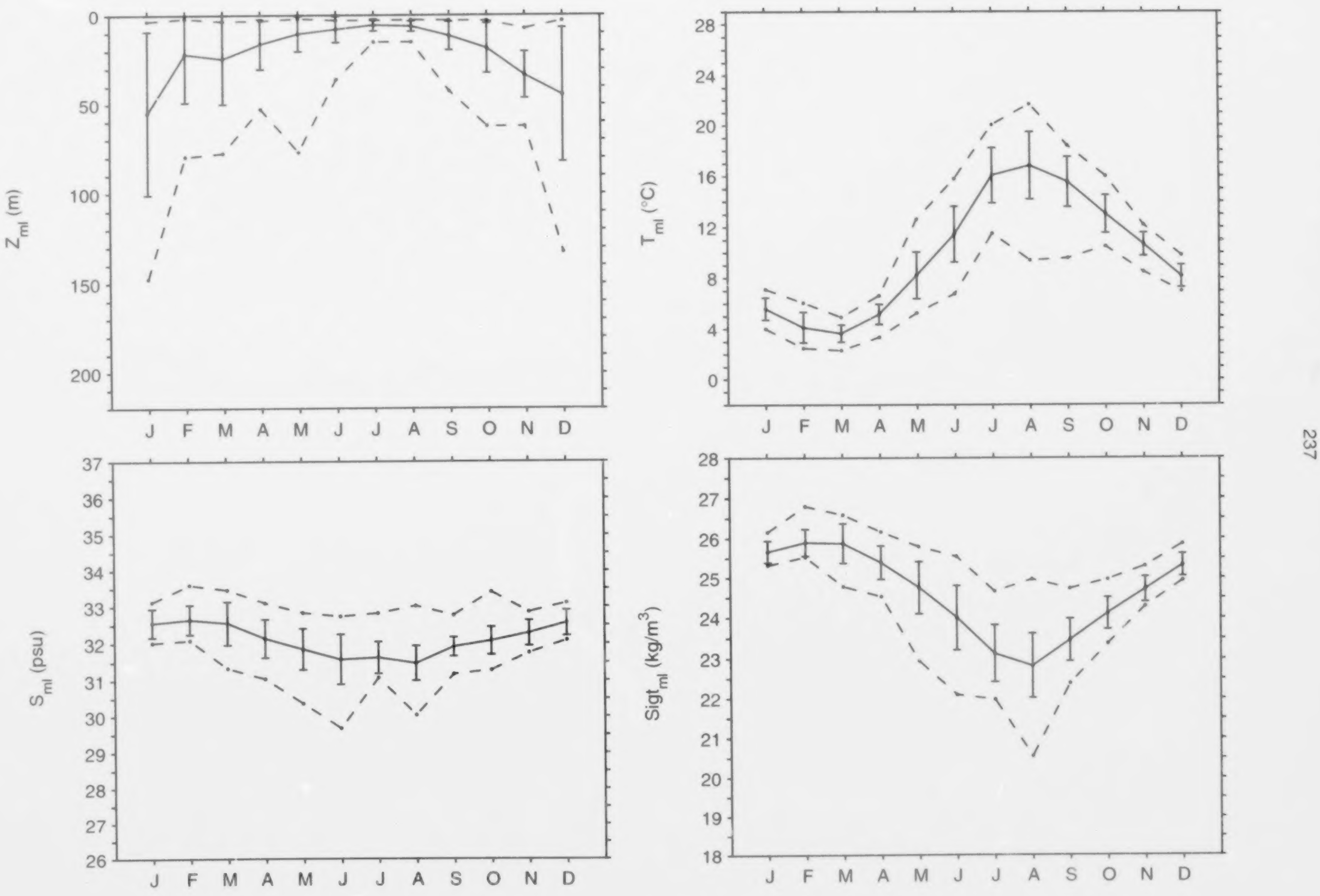

Figure 59c. Monthly statistics of mixed layer characteristics for SS56 (– : mean±sd; –– : min,max).

Table 57. Monthly statistics of mixed layer characteristics for SS56.

Profiles extracted (#) : 815   Profiles retained (#) : 577   Profiles rejected (%) : 29.2
Mean seabed depth (m) for subregion : 112.9   Mean sounding depth (m) for profiles : 100.5

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	13	12	16	31	123	39	49	108	57	75	33	21
Mixed layer depth : Z_ml (m)												
mean	55.02	21.67	24.29	16.25	10.43	7.96	5.66	6.25	11.58	18.43	33.39	44.58
median	42.50	10.00	15.00	12.50	7.65	5.50	3.50	7.50	12.50	15.00	32.50	32.50
min	3.50	2.00	3.50	3.25	2.00	3.00	3.00	2.75	3.00	3.25	7.50	3.25
max	147.50	79.50	77.50	52.75	77.00	36.00	15.00	15.00	42.50	62.50	62.50	132.50
s.d.	45.86	27.28	25.63	13.90	9.76	7.34	3.27	2.90	7.88	13.79	13.02	37.61
Mixed layer temperature : T_ml (deg.C)												
mean	5.59	4.13	3.65	5.16	8.22	11.45	16.06	16.83	15.56	13.04	10.68	8.17
median	5.80	3.95	3.79	5.28	7.91	11.62	16.15	17.33	15.66	12.93	10.76	8.25
min	4.02	2.49	2.31	3.36	5.26	6.77	11.52	9.41	9.59	10.51	8.51	6.99
max	7.12	6.07	4.92	6.63	12.61	15.78	20.03	21.69	18.40	16.00	12.20	9.82
s.d.	0.87	1.21	0.67	0.79	1.84	2.18	2.17	2.64	1.96	1.48	0.91	0.88
Mixed layer salinity : S_ml (psu)												
mean	32.56	32.65	32.56	32.15	31.86	31.58	31.63	31.48	31.92	32.08	32.29	32.56
median	32.64	32.56	32.66	32.11	31.99	31.71	31.51	31.47	31.88	32.01	32.30	32.60
min	32.02	32.09	31.34	31.05	30.36	29.68	31.08	30.05	31.18	31.29	31.76	32.09
max	33.13	33.60	33.47	33.11	32.84	32.74	32.83	33.03	32.77	33.41	32.86	33.10
s.d.	0.39	0.40	0.59	0.51	0.55	0.68	0.43	0.47	0.25	0.37	0.34	0.34
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.66	25.90	25.88	25.39	24.76	24.01	23.12	22.82	23.46	24.11	24.72	25.33
median	25.67	25.89	26.00	25.37	24.78	24.06	23.03	22.64	23.46	24.12	24.70	25.30
min	25.32	25.53	24.78	24.53	22.95	22.10	21.98	20.55	22.39	23.38	24.29	24.94
max	26.16	26.80	26.59	26.17	25.80	25.55	24.66	24.97	24.73	24.96	25.30	25.86
s.d.	0.27	0.34	0.50	0.43	0.66	0.80	0.70	0.80	0.52	0.39	0.32	0.28

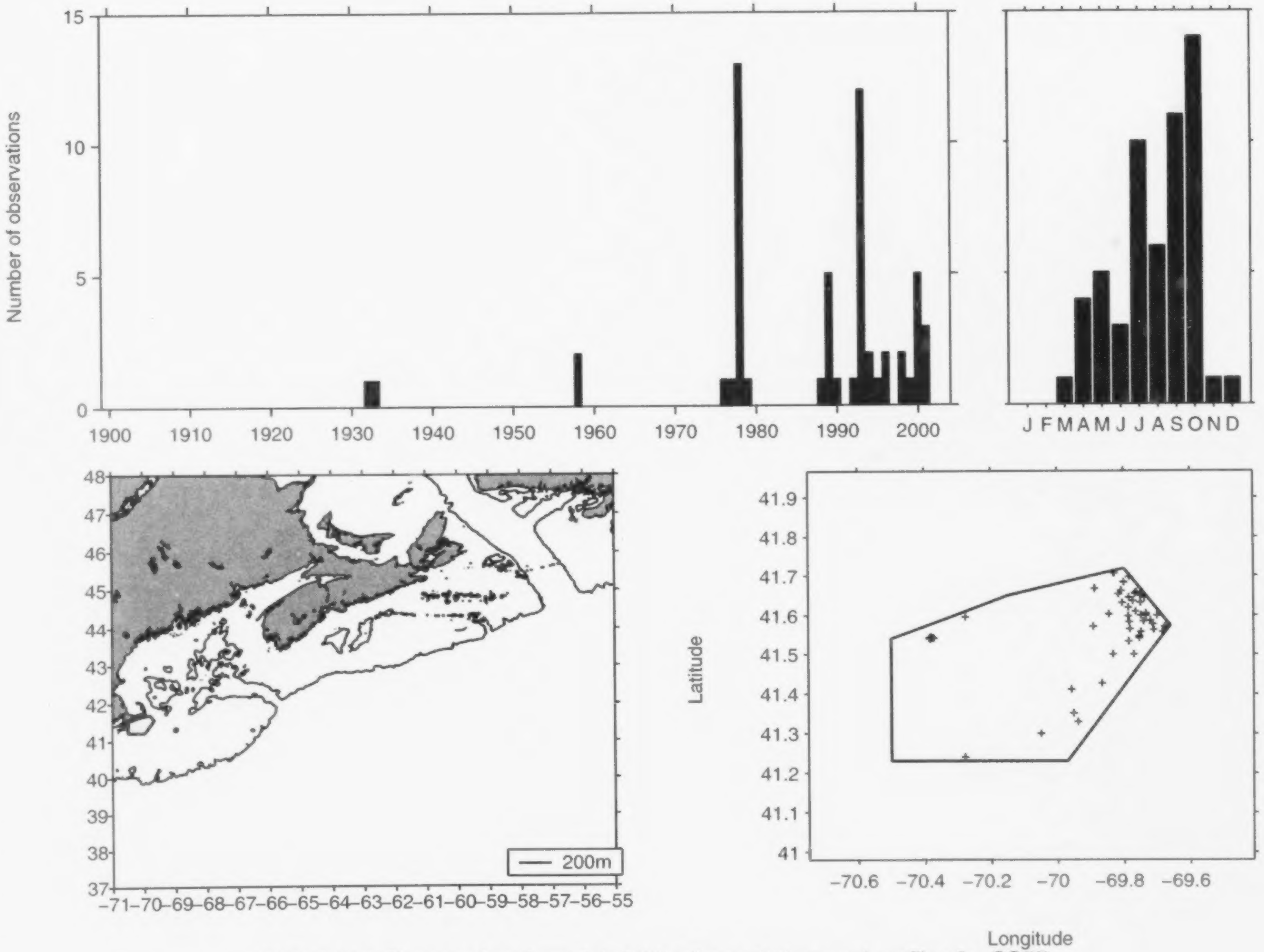

Figure 60a. Temporal and spatial distributions of observed profiles for SS57.

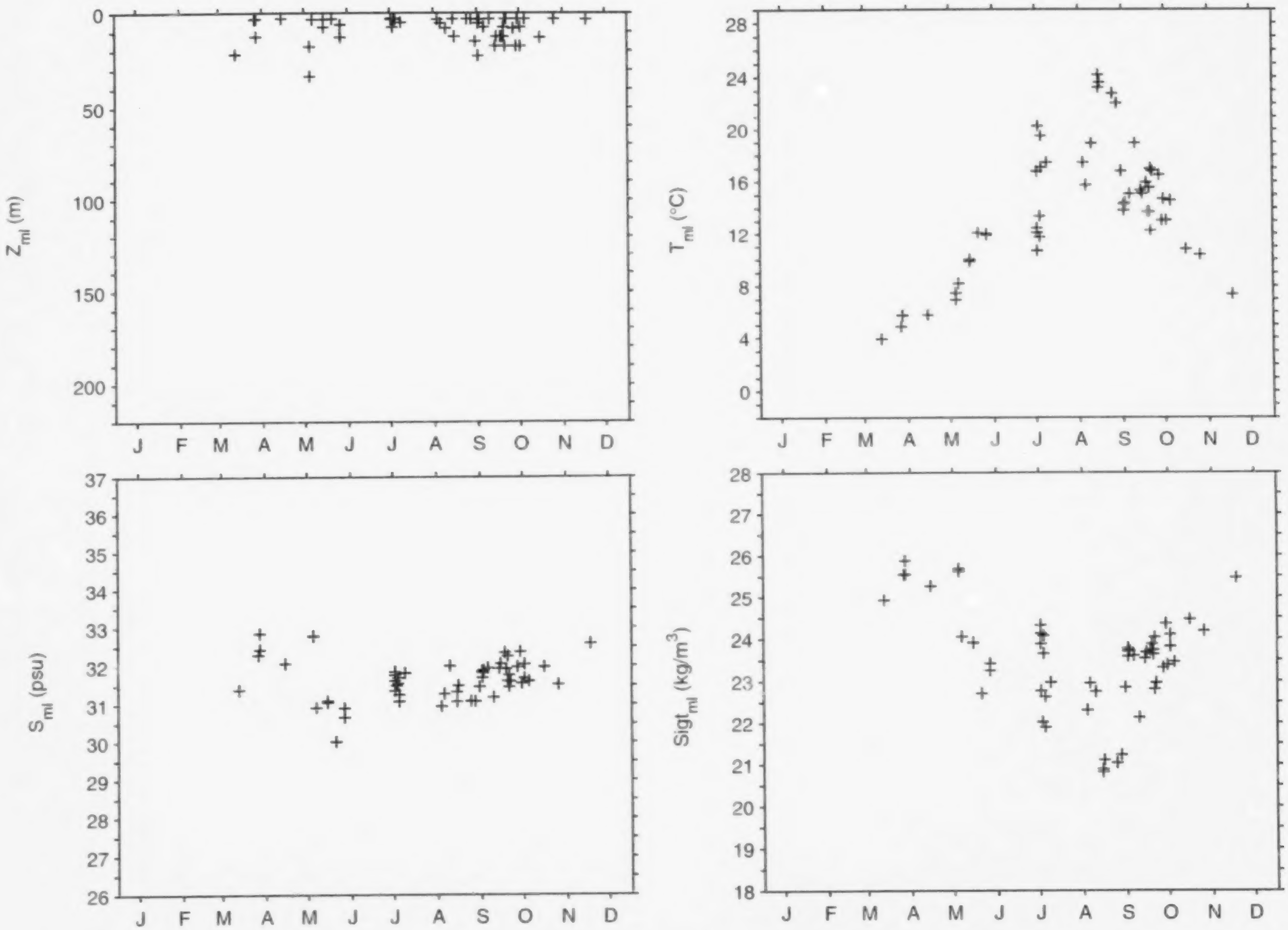

Figure 60b. Calculated mixed layer characteristics for SS57.

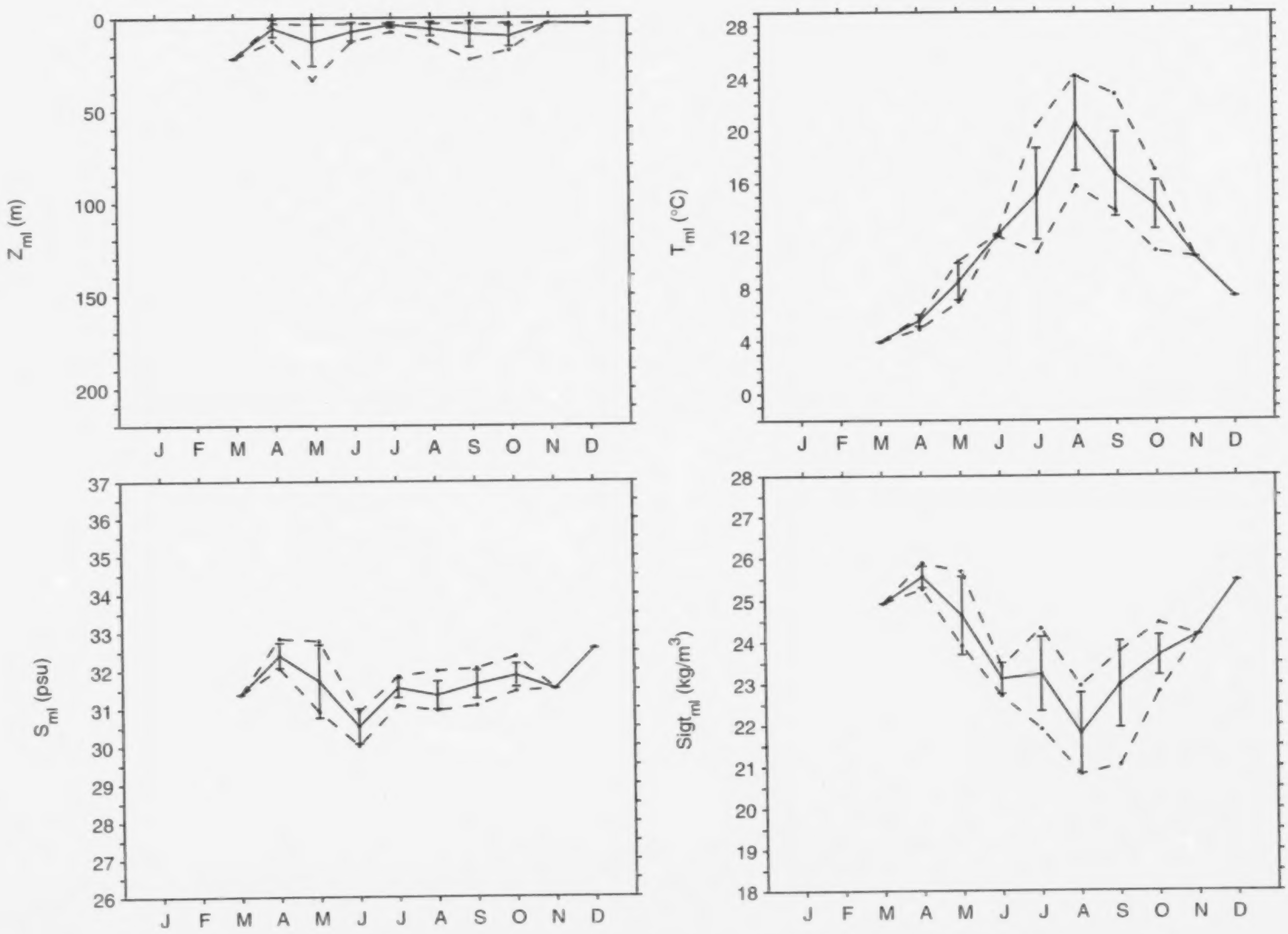

Figure 60c. Monthly statistics of mixed layer characteristics for SS57 (– : mean±sd; –– : min,max).

Table 58. Monthly statistics of mixed layer characteristics for SS57.

Profiles extracted (#) : 107   Profiles retained (#) : 56   Profiles rejected (%) : 47.7
Mean seabed depth (m) for subregion : 20.9   Mean sounding depth (m) for profiles : 40.9

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	0	0	1	4	5	3	10	6	11	14	1	1
Mixed layer depth : Z_ml (m)												
mean	NaN	NaN	21.75	5.56	13.06	7.47	3.85	6.00	8.84	9.95	3.25	3.50
median	NaN	NaN	21.75	3.38	7.50	6.25	3.50	4.50	5.50	10.38	3.25	3.50
min	NaN	NaN	21.75	3.00	3.50	3.25	3.00	3.25	3.25	3.25	3.25	3.50
max	NaN	NaN	21.75	12.50	33.15	12.90	7.50	12.50	22.50	17.50	3.25	3.50
s.d.	NaN	NaN	NaN	NaN	12.63	NaN	1.42	3.68	6.90	5.51	NaN	NaN
Mixed layer temperature : T_ml (deg.C)												
mean	NaN	NaN	3.92	5.53	8.49	12.00	15.14	20.52	16.64	14.34	10.37	7.39
median	NaN	NaN	3.92	5.74	8.18	12.00	15.08	21.08	15.12	14.16	10.37	7.39
min	NaN	NaN	3.92	4.86	6.96	11.91	10.67	15.73	13.85	10.80	10.37	7.39
max	NaN	NaN	3.92	5.78	10.00	12.08	20.27	24.17	22.78	16.99	10.37	7.39
s.d.	NaN	NaN	NaN	NaN	1.38	NaN	3.47	3.61	3.20	1.85	NaN	NaN
Mixed layer salinity : S_ml (psu)												
mean	NaN	NaN	31.38	32.41	31.73	30.53	31.55	31.35	31.64	31.87	31.52	32.58
median	NaN	NaN	31.38	32.36	31.10	30.67	31.59	31.30	31.83	31.85	31.52	32.58
min	NaN	NaN	31.38	32.07	30.92	30.02	31.08	30.95	31.08	31.46	31.52	32.58
max	NaN	NaN	31.38	32.85	32.79	30.91	31.85	32.00	32.06	32.37	31.52	32.58
s.d.	NaN	NaN	NaN	NaN	0.97	NaN	0.25	0.37	0.37	0.30	NaN	NaN
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	NaN	NaN	24.92	25.56	24.63	23.12	23.23	21.81	22.98	23.69	24.18	25.46
median	NaN	NaN	24.92	25.55	24.05	23.25	23.31	21.71	23.58	23.73	24.18	25.46
min	NaN	NaN	24.92	25.26	23.90	22.71	21.90	20.82	21.04	22.81	24.18	25.46
max	NaN	NaN	24.92	25.88	25.68	23.41	24.32	22.95	23.77	24.45	24.18	25.46
s.d.	NaN	NaN	NaN	NaN	0.93	NaN	0.89	0.97	1.04	0.48	NaN	NaN

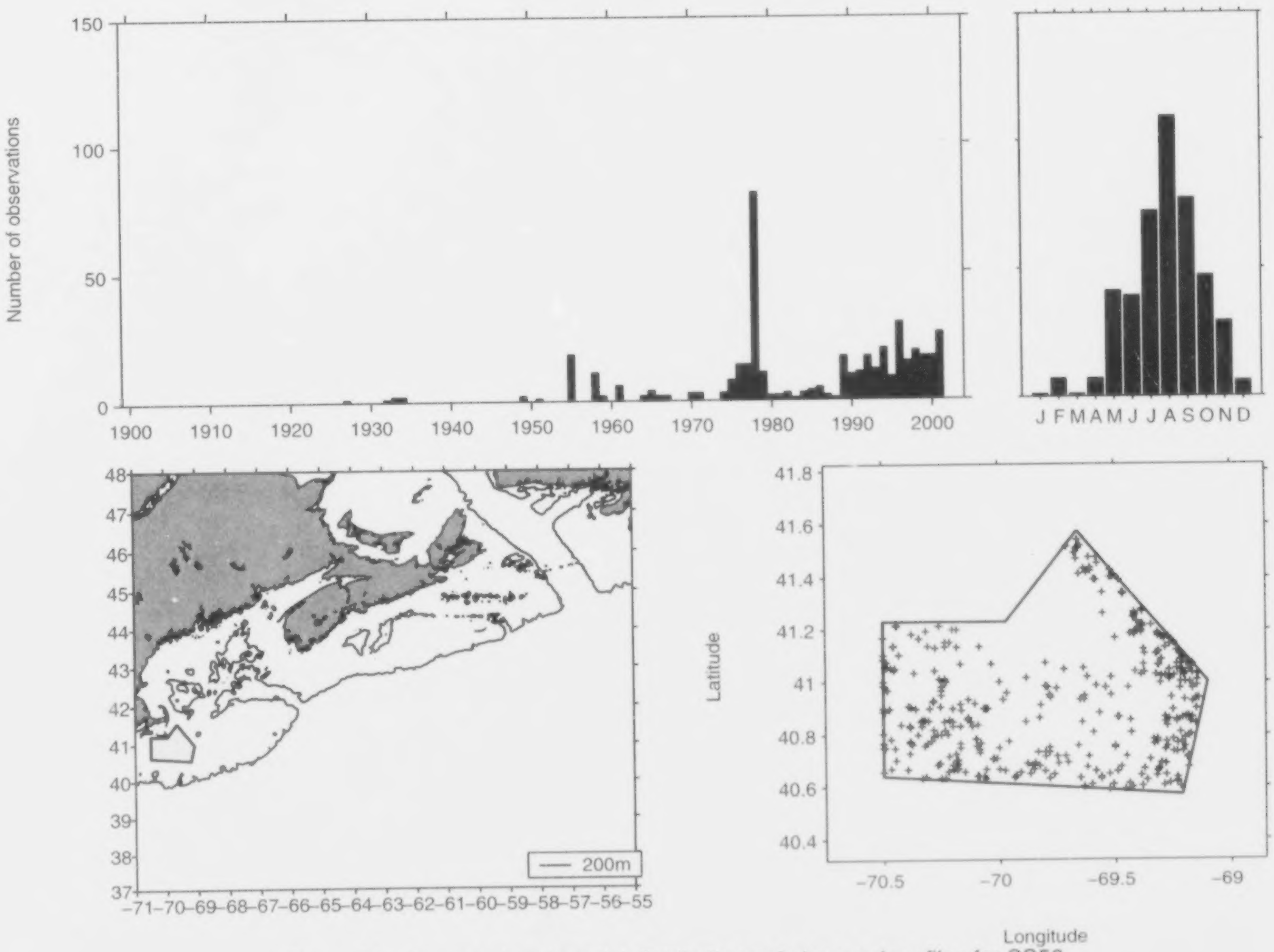

Figure 61a. Temporal and spatial distributions of observed profiles for SS58.

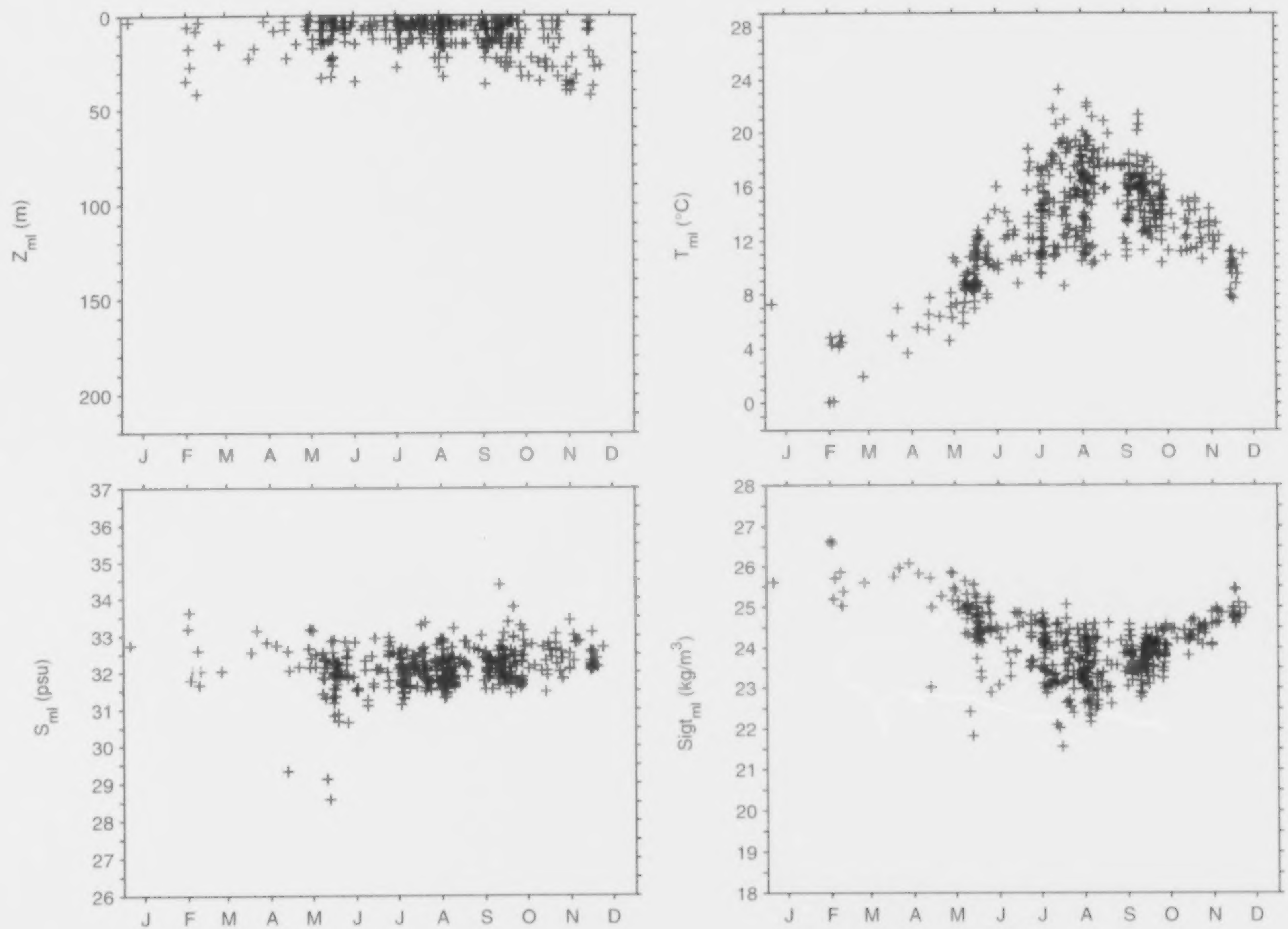

Figure 61b. Calculated mixed layer characteristics for SS58.

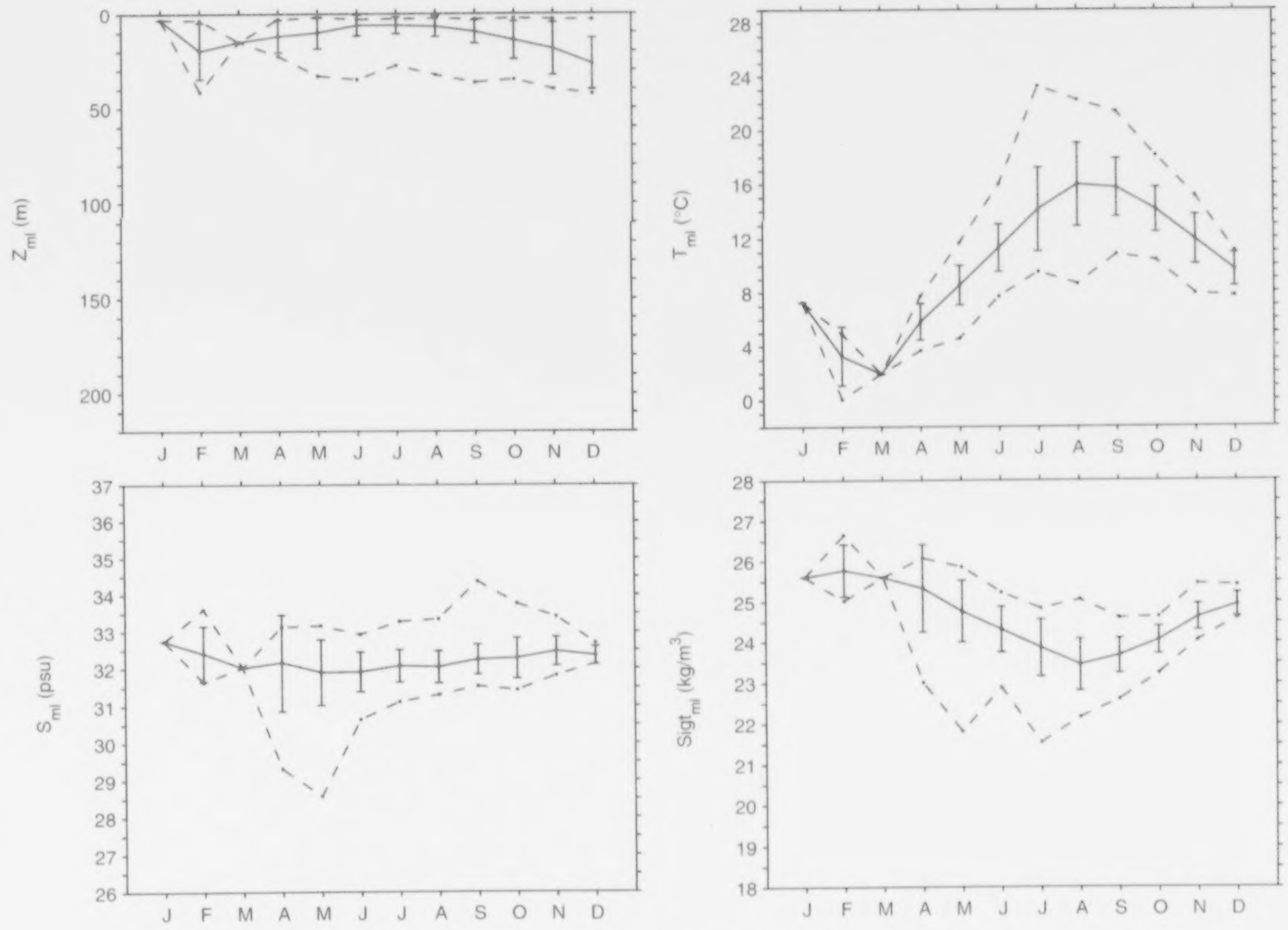

Figure 61c. Monthly statistics of mixed layer characteristics for SS58 (– : mean±sd; –– : min,max).

Table 59. Monthly statistics of mixed layer characteristics for SS58.

Profiles extracted (#) : 1352 Profiles retained (#) : 436 Profiles rejected (%) : 67.8
Mean seabed depth (m) for subregion : 46.7 Mean sounding depth (m) for profiles : 41.5

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	1	7	1	7	41	39	69	112	76	48	29	6
Mixed layer depth : Z_ml (m)												
mean	3.25	19.71	15.00	12.01	10.15	6.22	6.17	6.80	9.61	14.18	18.65	26.58
median	3.25	17.50	15.00	8.00	7.50	3.50	3.50	5.00	7.50	12.50	12.50	26.88
min	3.25	3.50	15.00	3.00	2.00	3.00	2.75	2.50	3.00	2.50	3.00	3.25
max	3.25	41.50	15.00	22.50	33.00	35.00	27.50	32.50	36.50	35.00	40.00	42.50
s.d.	NaN	14.94	NaN	8.62	8.40	5.64	4.53	5.43	6.19	10.02	13.96	13.67
Mixed layer temperature : T_ml (deg.C)												
mean	7.28	3.27	1.95	5.82	8.53	11.30	14.14	15.96	15.74	14.11	11.91	9.66
median	7.28	4.30	1.95	5.55	8.61	11.07	13.80	16.41	16.03	14.12	11.95	9.85
min	7.28	0.07	1.95	3.68	4.59	7.70	9.52	8.63	10.81	10.38	7.90	7.71
max	7.28	4.94	1.95	7.73	11.67	16.00	23.26	22.23	21.36	18.11	15.14	11.06
s.d.	NaN	2.19	NaN	1.36	1.46	1.75	3.09	3.07	2.15	1.65	1.83	1.23
Mixed layer salinity : S_ml (psu)												
mean	32.74	32.41	32.03	32.17	31.92	31.93	32.08	32.05	32.25	32.28	32.47	32.35
median	32.74	32.03	32.03	32.58	32.13	31.94	32.12	32.03	32.26	32.22	32.38	32.28
min	32.74	31.65	32.03	29.32	28.58	30.65	31.13	31.31	31.54	31.43	31.82	32.12
max	32.74	33.62	32.03	33.15	33.18	32.94	33.29	33.36	34.37	33.78	33.42	32.69
s.d.	NaN	0.75	NaN	1.30	0.88	0.53	0.43	0.43	0.41	0.55	0.39	0.24
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.60	25.77	25.59	25.33	24.77	24.32	23.86	23.45	23.67	24.05	24.63	24.93
median	25.60	25.70	25.59	25.74	24.92	24.44	24.05	23.40	23.62	24.08	24.64	24.89
min	25.60	25.03	25.59	23.01	21.82	22.89	21.55	22.17	22.61	23.24	24.05	24.60
max	25.60	26.64	25.59	26.08	25.86	25.23	24.84	25.06	24.61	24.64	25.45	25.41
s.d.	NaN	0.65	NaN	1.08	0.76	0.57	0.70	0.63	0.43	0.35	0.33	0.29

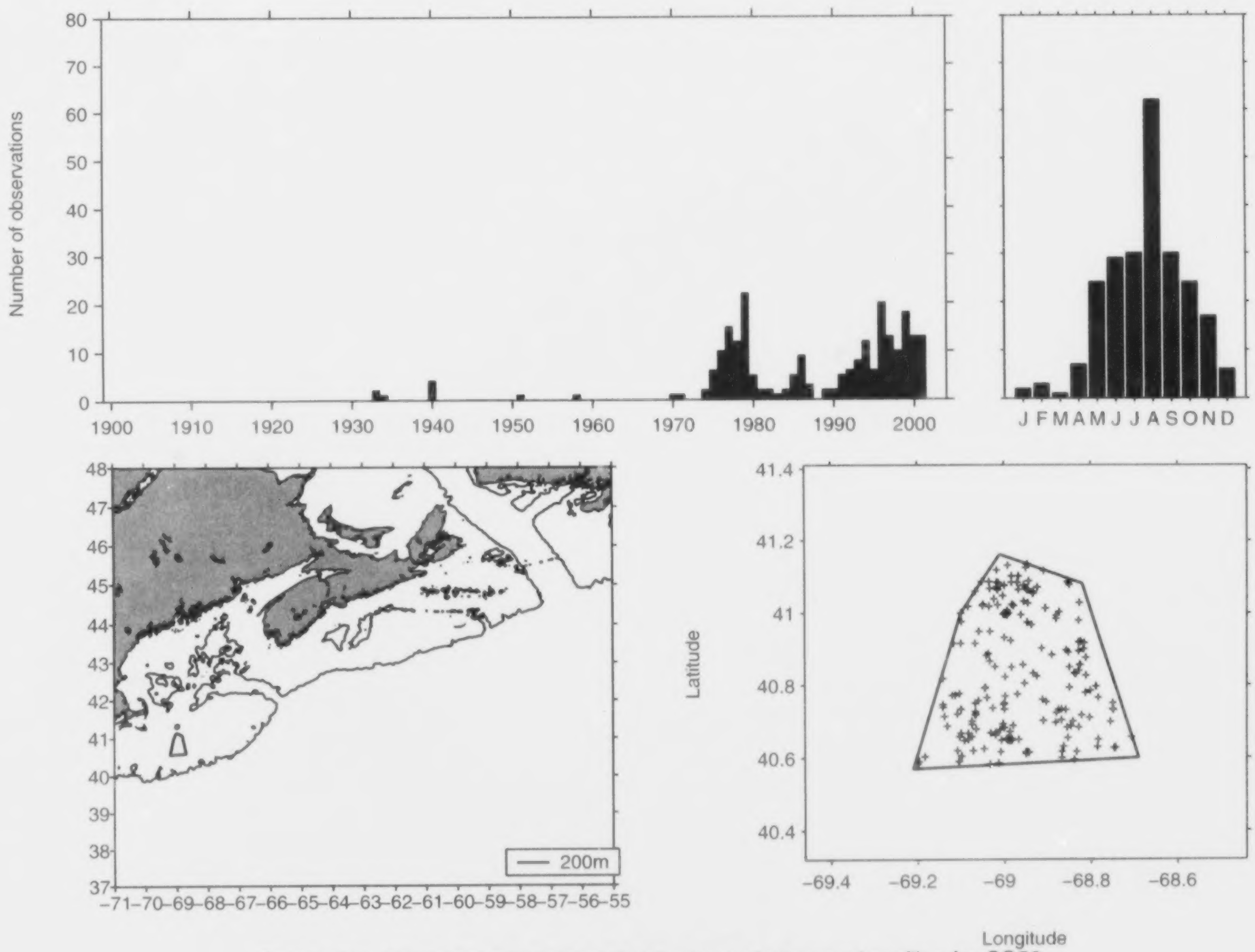

Figure 62a. Temporal and spatial distributions of observed profiles for SS59.

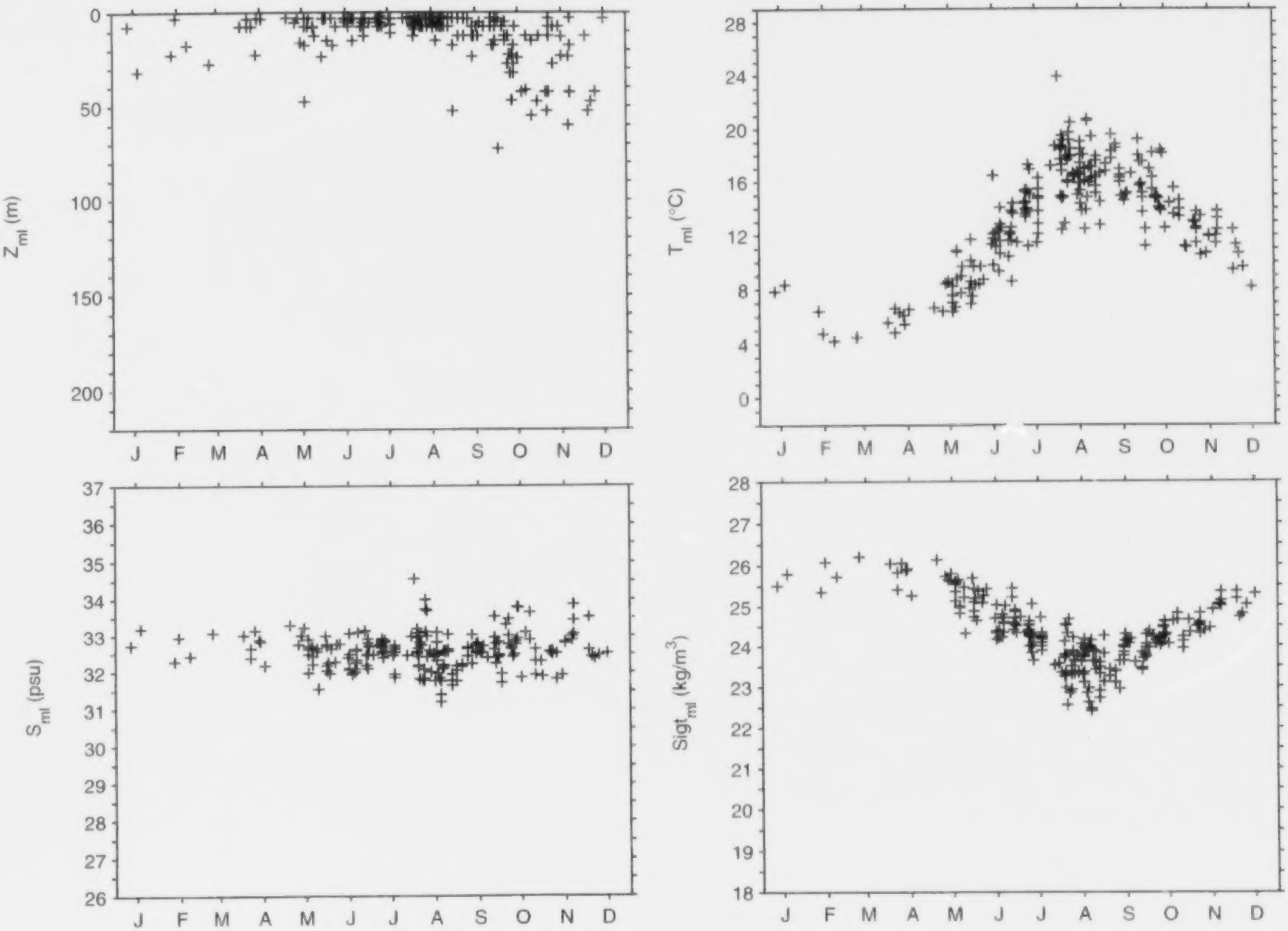

Figure 62b. Calculated mixed layer characteristics for SS59.

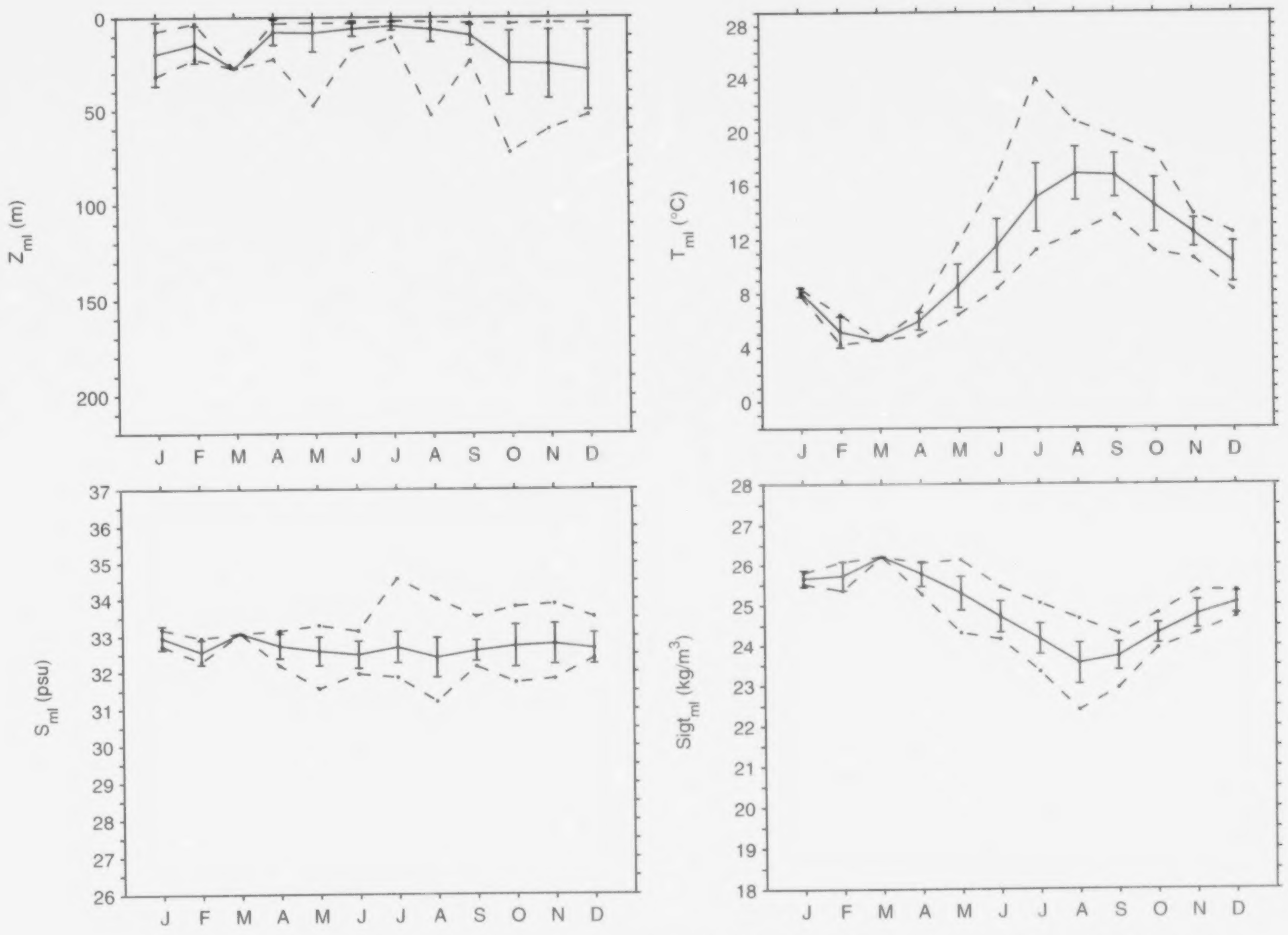

Figure 62c. Monthly statistics of mixed layer characteristics for SS59 (– : mean±sd; –– : min,max).

Table 60. Monthly statistics of mixed layer characteristics for SS59.

Profiles extracted (#) : 565 Profiles retained (#) : 235 Profiles rejected (%) : 58.4
Mean seabed depth (m) for subregion : 69.6 Mean sounding depth (m) for profiles : 76.0

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	2	3	1	7	24	29	30	62	28	26	17	6
Mixed layer depth : Z_ml (m)												
mean	19.62	14.42	27.50	7.89	8.26	6.13	4.75	6.53	9.64	24.76	25.21	28.46
median	19.62	17.50	27.50	7.50	3.50	5.00	3.50	6.00	7.50	20.00	23.15	27.50
min	7.50	3.25	27.50	3.25	3.00	3.25	2.00	2.50	3.25	3.50	3.00	3.25
max	31.75	22.50	27.50	22.50	47.50	17.50	11.00	52.50	23.50	72.50	60.00	52.50
s.d.	NaN	NaN	NaN	6.76	10.00	4.03	2.15	6.63	5.49	17.29	18.48	21.37
Mixed layer temperature : T_ml (deg.C)												
mean	8.11	5.13	4.50	5.91	8.54	11.51	15.04	16.82	16.69	14.48	12.44	10.28
median	8.11	4.77	4.50	6.08	8.33	11.61	14.81	17.05	16.57	14.29	12.43	10.15
min	7.86	4.21	4.50	4.83	6.37	8.32	11.19	12.40	13.74	11.09	10.54	8.19
max	8.35	6.41	4.50	6.61	11.68	16.46	23.90	20.73	19.60	18.43	13.83	12.44
s.d.	NaN	NaN	NaN	0.65	1.62	1.96	2.51	1.97	1.61	2.01	1.04	1.50
Mixed layer salinity : S_ml (psu)												
mean	32.96	32.56	33.08	32.73	32.59	32.49	32.70	32.41	32.60	32.73	32.78	32.66
median	32.96	32.44	33.08	32.84	32.69	32.49	32.67	32.47	32.55	32.77	32.58	32.49
min	32.73	32.29	33.08	32.18	31.56	31.95	31.86	31.21	32.15	31.72	31.82	32.38
max	33.19	32.95	33.08	33.15	33.30	33.15	34.56	34.00	33.53	33.80	33.87	33.52
s.d.	NaN	NaN	NaN	0.35	0.40	0.38	0.43	0.55	0.29	0.59	0.56	0.43
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.66	25.72	26.21	25.77	25.29	24.71	24.16	23.55	23.73	24.32	24.78	25.07
median	25.66	25.73	26.21	25.88	25.29	24.64	24.21	23.62	23.74	24.24	24.82	25.11
min	25.51	25.36	26.21	25.26	24.32	24.16	23.34	22.40	22.94	23.94	24.31	24.72
max	25.80	26.08	26.21	26.05	26.13	25.44	25.05	24.67	24.29	24.81	25.35	25.36
s.d.	NaN	NaN	NaN	0.31	0.41	0.38	0.39	0.51	0.36	0.26	0.34	0.26

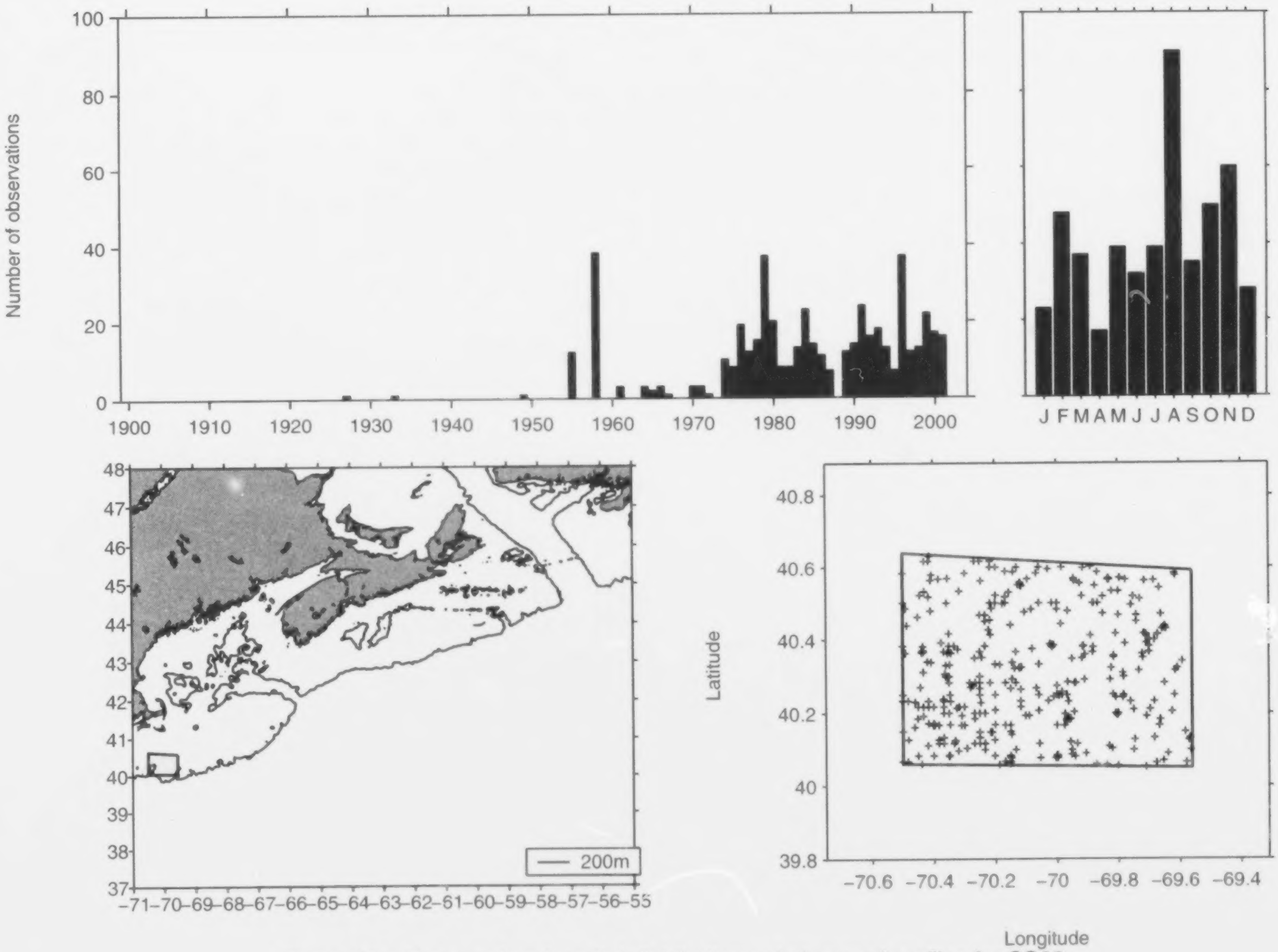

Figure 63a. Temporal and spatial distributions of observed profiles for SS60.

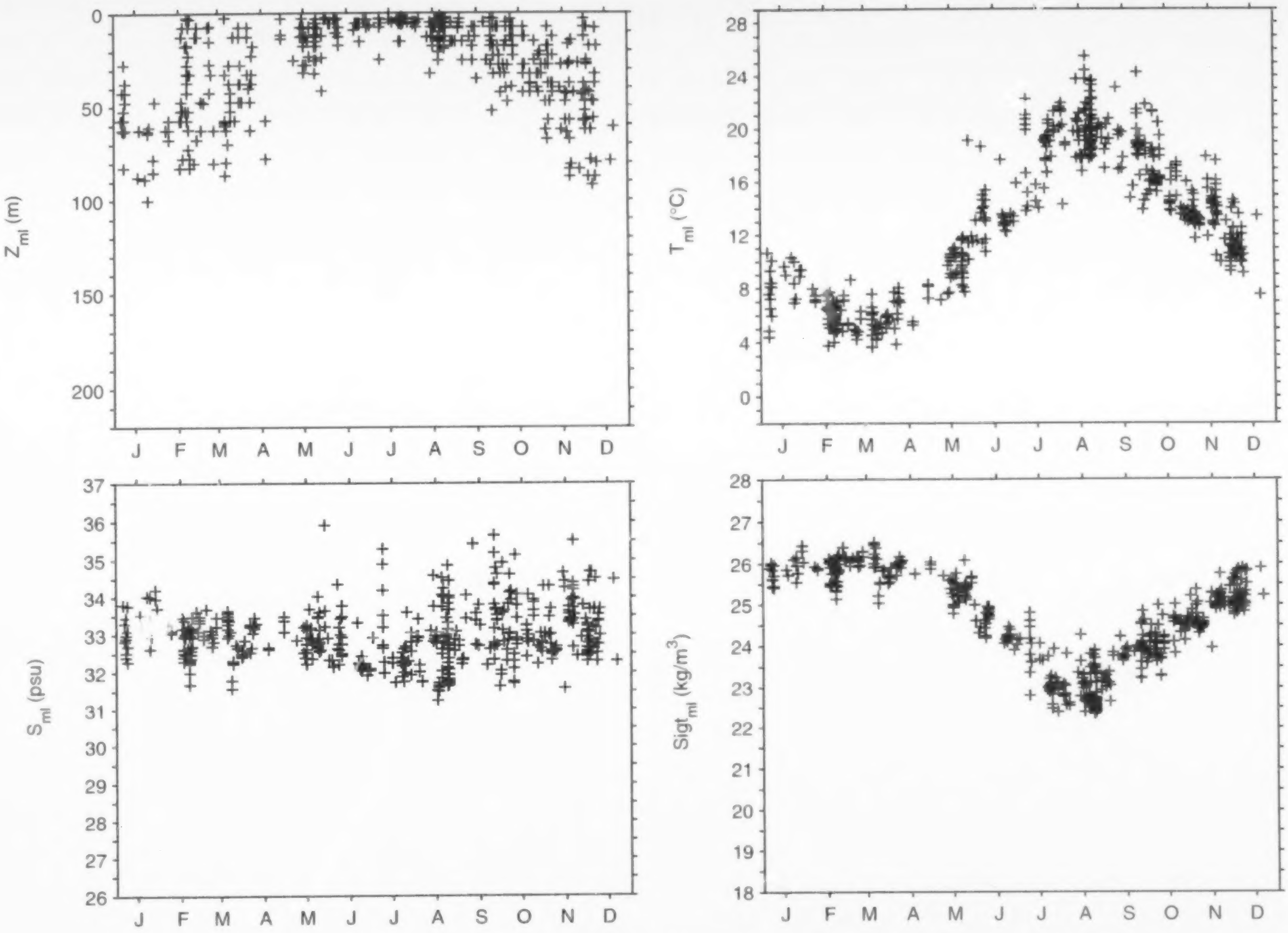

Figure 63b. Calculated mixed layer characteristics for SS60.

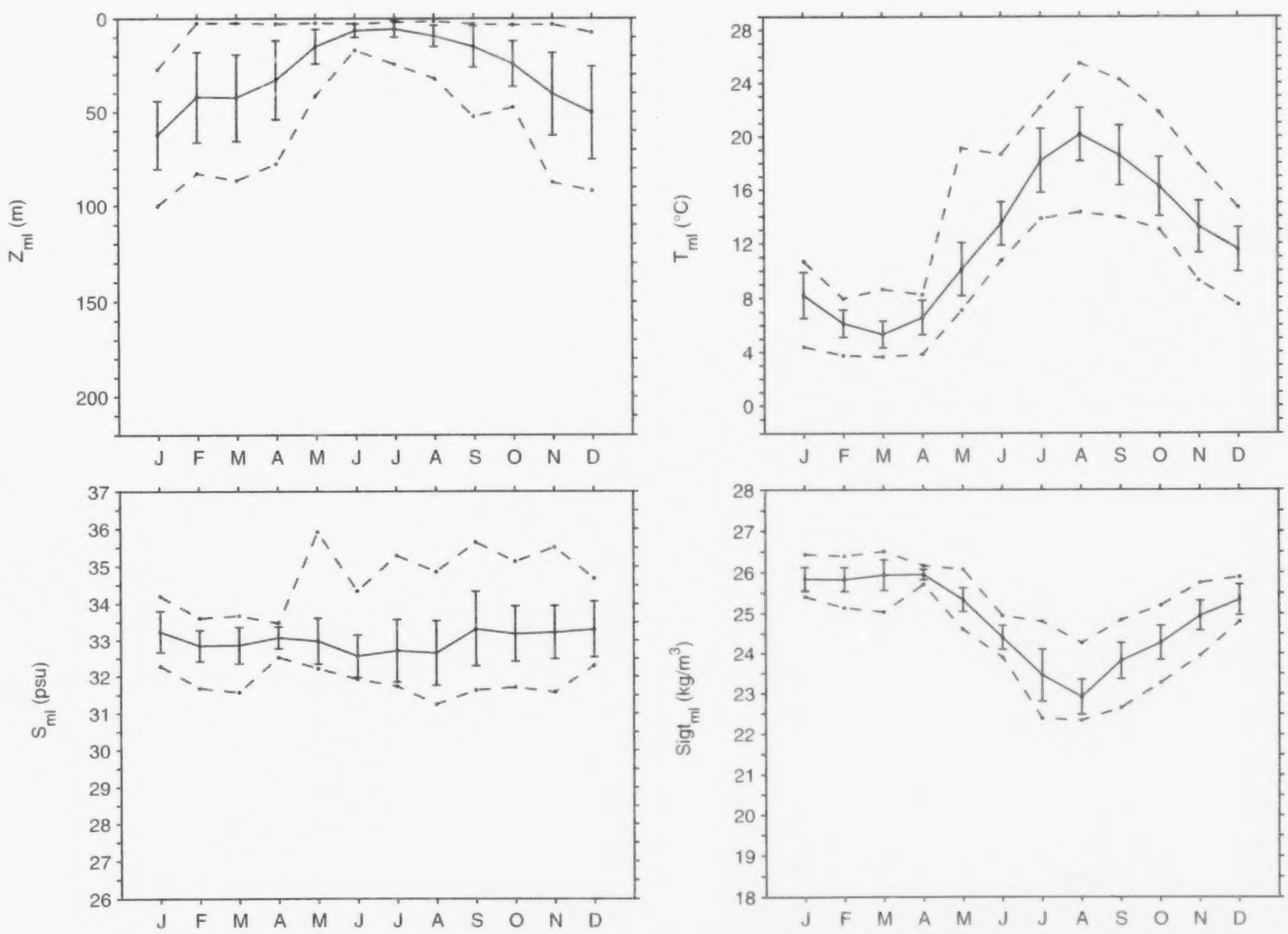

Figure 63c. Monthly statistics of mixed layer characteristics for SS60 (– : mean±sd; –– : min,max).

Table 61. Monthly statistics of mixed layer characteristics for SS60.

Profiles extracted (#) : 699 Profiles retained (#) : 498 Profiles rejected (%) : 28.8
Mean seabed depth (m) for subregion : 114.0 Mean sounding depth (m) for profiles : 192.4

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	23	48	37	17	39	32	37	92	35	50	60	28
Mixed layer depth : Z_ml (m)												
mean	62.16	42.01	42.40	32.97	15.03	6.48	5.61	9.33	14.97	24.25	40.31	50.32
median	62.50	49.88	47.40	32.50	12.50	5.50	5.25	7.50	12.50	27.50	42.50	47.50
min	27.25	2.50	2.50	3.00	2.50	3.00	2.00	1.50	3.00	3.50	3.25	7.50
max	100.00	82.65	86.50	77.50	41.50	17.00	24.50	32.00	52.50	47.50	87.50	92.00
s.d.	18.03	24.11	23.06	21.10	9.23	3.54	4.24	5.70	11.02	12.27	22.02	24.71
Mixed layer temperature : T_ml (deg.C)												
mean	8.21	6.15	5.34	6.59	10.11	13.47	18.19	20.16	18.58	16.25	13.23	11.55
median	8.40	6.41	5.26	6.94	10.15	13.25	19.01	19.87	18.82	16.09	13.29	11.29
min	4.40	3.76	3.65	3.86	7.12	10.75	13.82	14.30	13.93	13.03	9.27	7.52
max	10.69	7.97	8.64	8.26	19.13	18.67	22.21	25.50	24.28	21.82	17.92	14.65
s.d.	1.68	1.01	0.99	1.26	1.94	1.59	2.40	1.99	2.25	2.22	1.92	1.63
Mixed layer salinity : S_ml (psu)												
mean	33.24	32.85	32.87	33.08	32.98	32.57	32.72	32.66	33.32	33.19	33.23	33.31
median	33.22	32.97	32.94	33.20	32.85	32.29	32.39	32.67	33.38	33.03	33.28	33.12
min	32.28	31.68	31.57	32.53	32.23	31.93	31.74	31.25	31.63	31.71	31.58	32.30
max	34.20	33.61	33.68	33.48	35.92	34.35	35.30	34.86	35.65	35.13	35.51	34.69
s.d.	0.57	0.43	0.51	0.31	0.63	0.59	0.86	0.90	1.02	0.76	0.73	0.77
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.84	25.83	25.94	25.95	25.34	24.41	23.46	22.92	23.82	24.28	24.95	25.34
median	25.86	25.88	25.96	25.97	25.39	24.29	23.23	22.77	23.86	24.29	25.01	25.24
min	25.41	25.14	25.04	25.72	24.61	23.90	22.39	22.34	22.65	23.27	23.95	24.81
max	26.44	26.40	26.51	26.17	26.08	24.95	24.80	24.27	24.84	25.20	25.76	25.90
s.d.	0.28	0.29	0.37	0.12	0.29	0.30	0.65	0.43	0.45	0.43	0.37	0.37

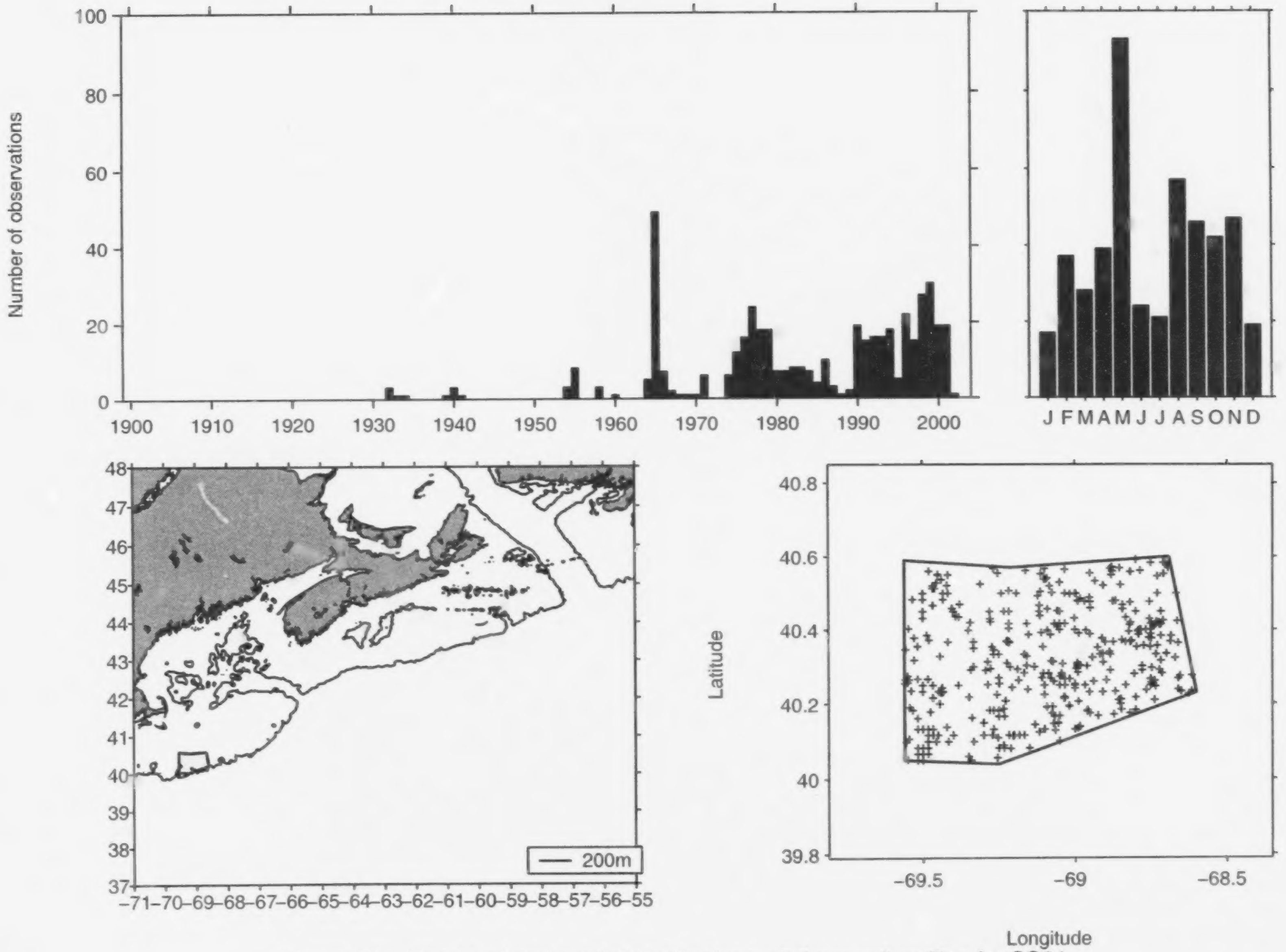

Figure 64a. Temporal and spatial distributions of observed profiles for SS61.

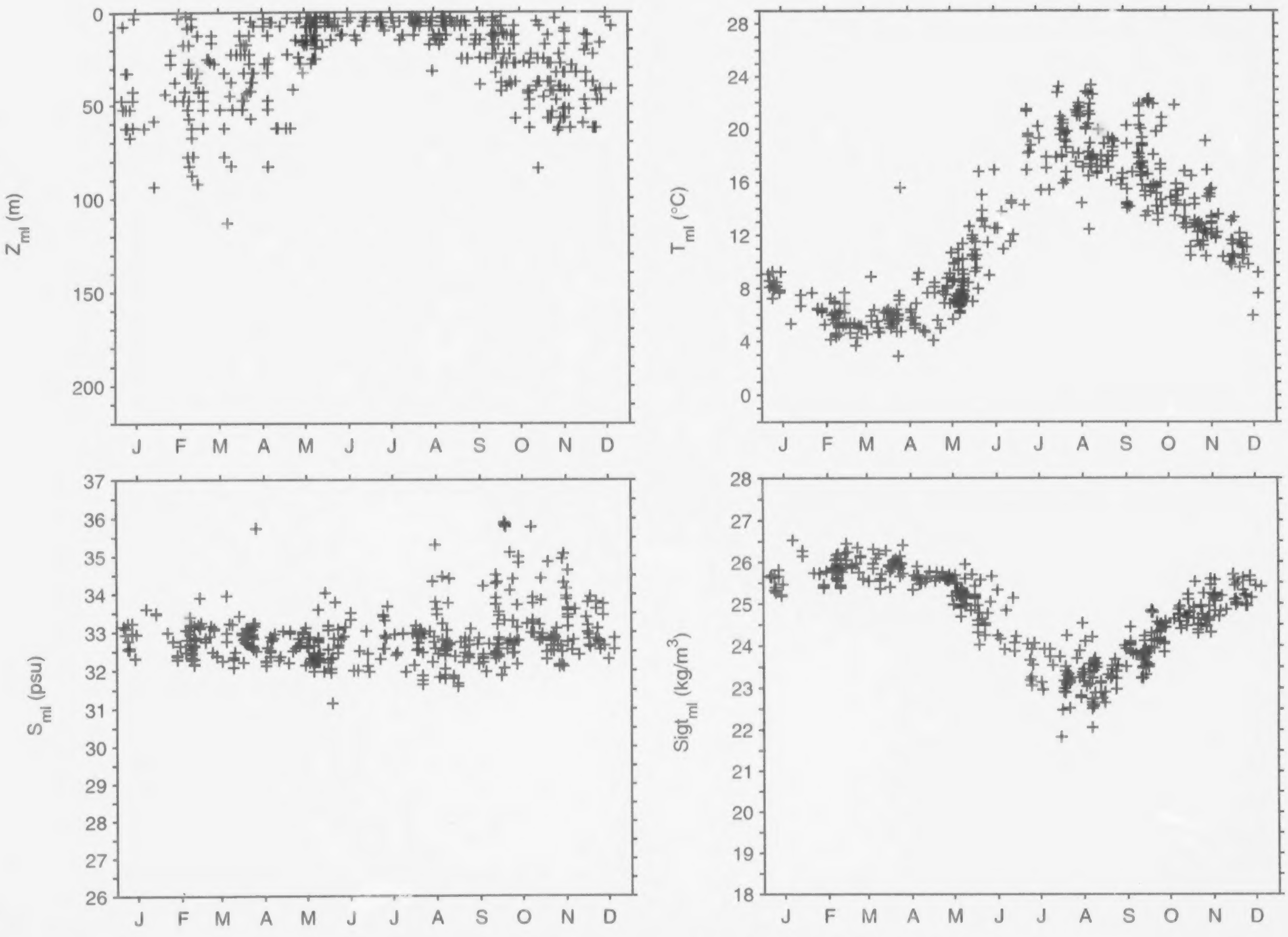

Figure 64b. Calculated mixed layer characteristics for SS61.

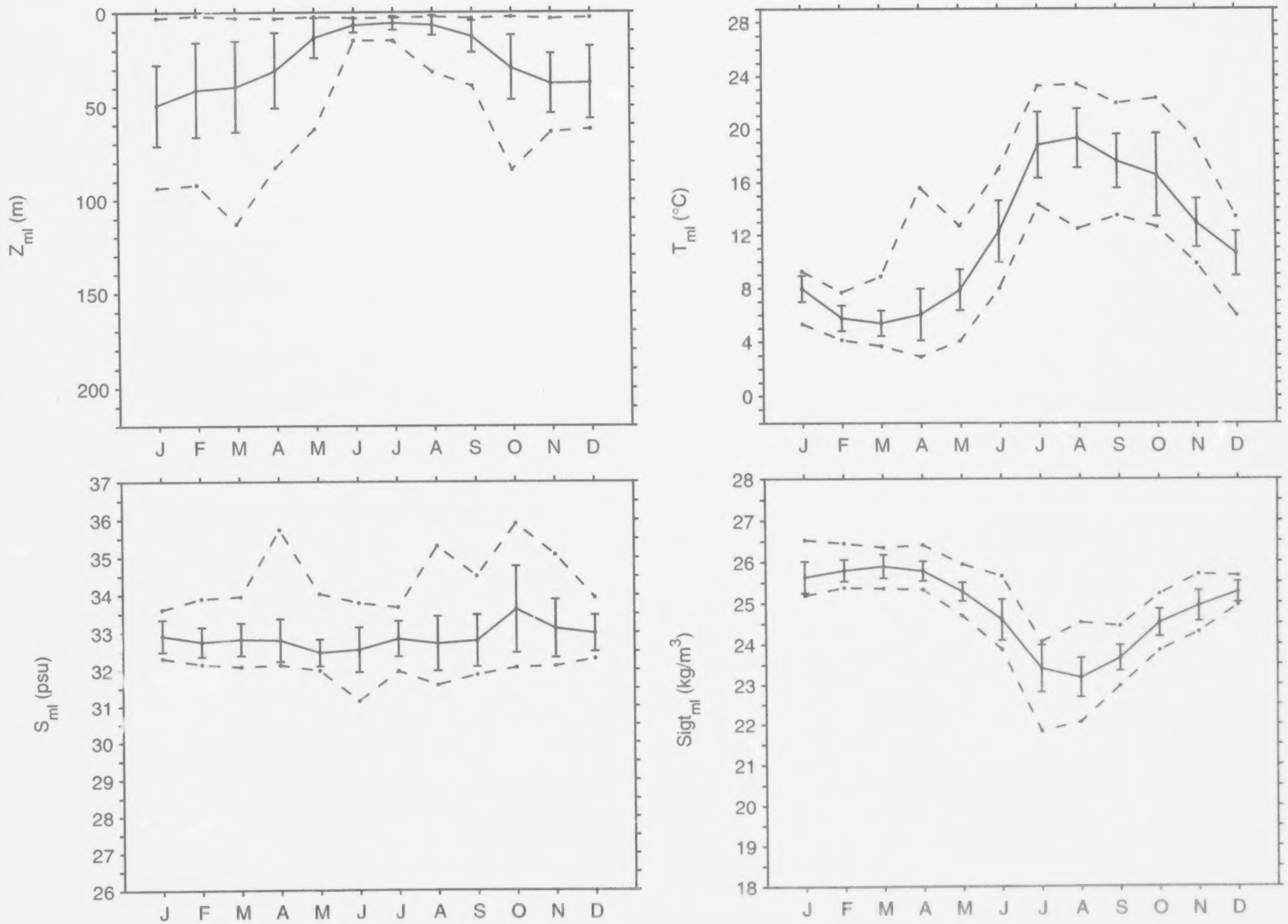

Figure 64c. Monthly statistics of mixed layer characteristics for SS61 (– : mean±sd; –– : min,max).

Table 62. Monthly statistics of mixed layer characteristics for SS61.

Profiles extracted (#) : 633   Profiles retained (#) : 470   Profiles rejected (%) : 25.8
Mean seabed depth (m) for subregion : 92.7   Mean sounding depth (m) for profiles : 90.5

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	17	37	28	39	93	24	18	60	46	42	47	19
Mixed layer depth : Z_ml (m)												
mean	49.41	41.23	39.55	30.90	13.51	6.99	5.85	6.91	12.84	29.35	37.70	37.37
median	52.50	37.50	35.00	27.50	15.00	6.50	4.25	5.25	12.50	27.45	37.50	41.50
min	3.25	2.00	3.25	3.50	2.50	3.15	3.00	2.50	3.25	2.50	3.50	3.00
max	93.50	92.00	113.00	82.75	62.50	15.00	15.00	31.50	39.00	84.00	64.00	62.50
s.d.	21.76	25.30	24.32	20.03	10.42	3.80	3.58	5.18	8.26	17.14	16.07	19.42
Mixed layer temperature : T_ml (deg.C)												
mean	7.98	5.77	5.39	6.04	7.87	12.29	18.77	19.29	17.57	16.53	12.91	10.58
median	8.11	6.00	5.29	5.68	7.40	12.32	18.56	19.63	17.53	15.57	12.66	11.14
min	5.33	4.14	3.69	2.90	4.08	7.99	14.31	12.48	13.50	12.60	9.83	5.98
max	9.27	7.69	8.89	15.58	12.70	16.96	23.25	23.38	21.92	22.30	19.14	13.39
s.d.	0.97	0.95	0.94	1.93	1.53	2.33	2.47	2.21	2.01	3.11	1.85	1.66
Mixed layer salinity : S_ml (psu)												
mean	32.91	32.75	32.82	32.80	32.46	32.54	32.83	32.71	32.79	33.62	33.11	32.98
median	32.94	32.75	32.83	32.77	32.26	32.48	32.92	32.64	32.63	33.21	32.80	32.83
min	32.31	32.15	32.08	32.13	31.98	31.15	31.97	31.59	31.87	32.06	32.10	32.30
max	33.61	33.90	33.96	35.74	34.03	33.79	33.68	35.31	34.51	35.90	35.08	33.94
s.d.	0.42	0.39	0.43	0.57	0.36	0.60	0.47	0.73	0.69	1.16	0.77	0.49
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.63	25.80	25.90	25.79	25.28	24.60	23.40	23.18	23.66	24.52	24.93	25.26
median	25.63	25.79	25.91	25.85	25.24	24.52	23.54	23.16	23.70	24.55	24.86	25.22
min	25.19	25.38	25.36	25.33	24.69	23.87	21.83	22.06	22.98	23.85	24.30	24.94
max	26.54	26.45	26.36	26.41	25.95	25.66	24.06	24.53	24.45	25.22	25.70	25.66
s.d.	0.39	0.26	0.28	0.24	0.22	0.50	0.58	0.49	0.31	0.33	0.37	0.25

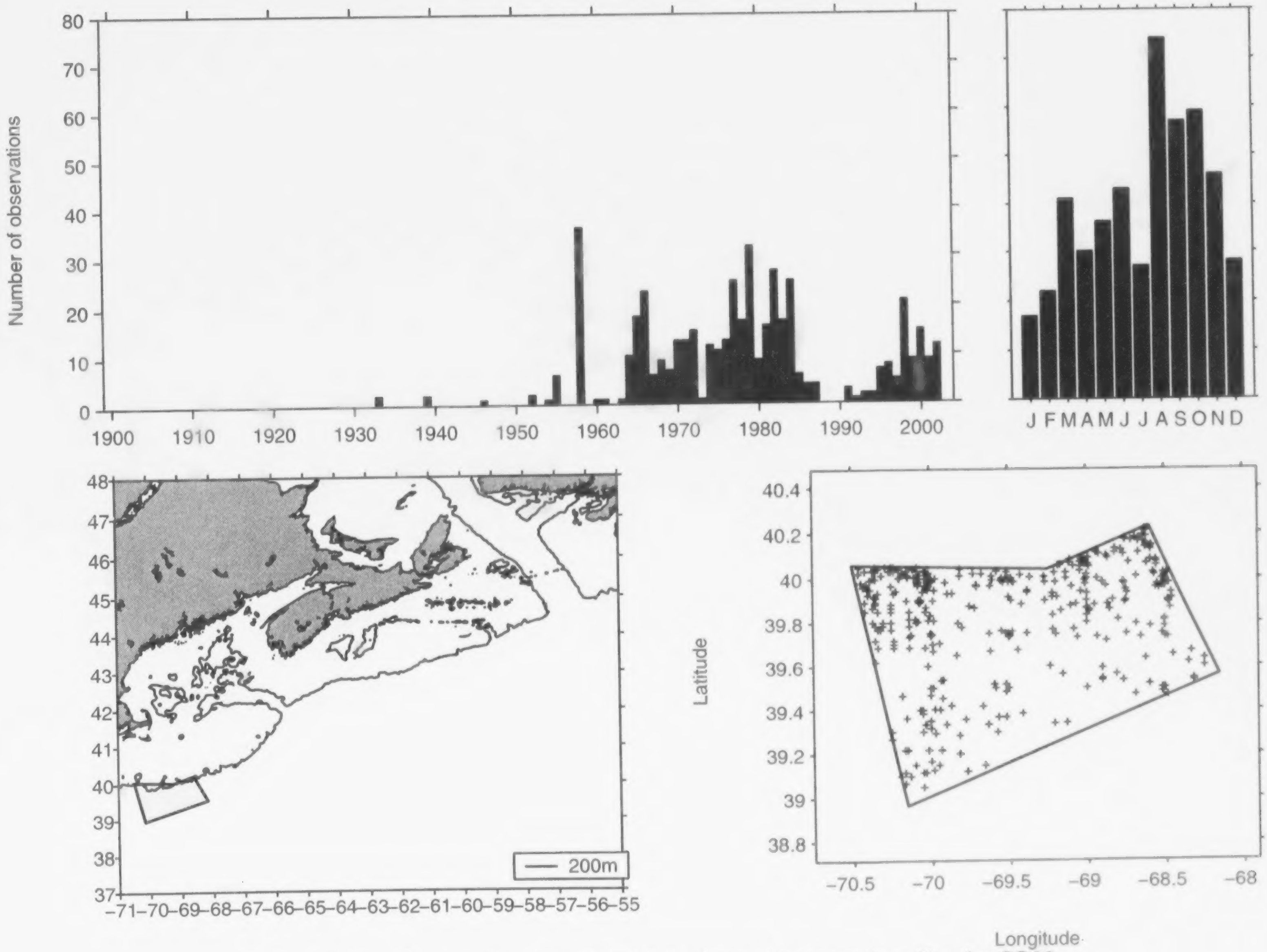

Figure 65a. Temporal and spatial distributions of observed profiles for SS62.

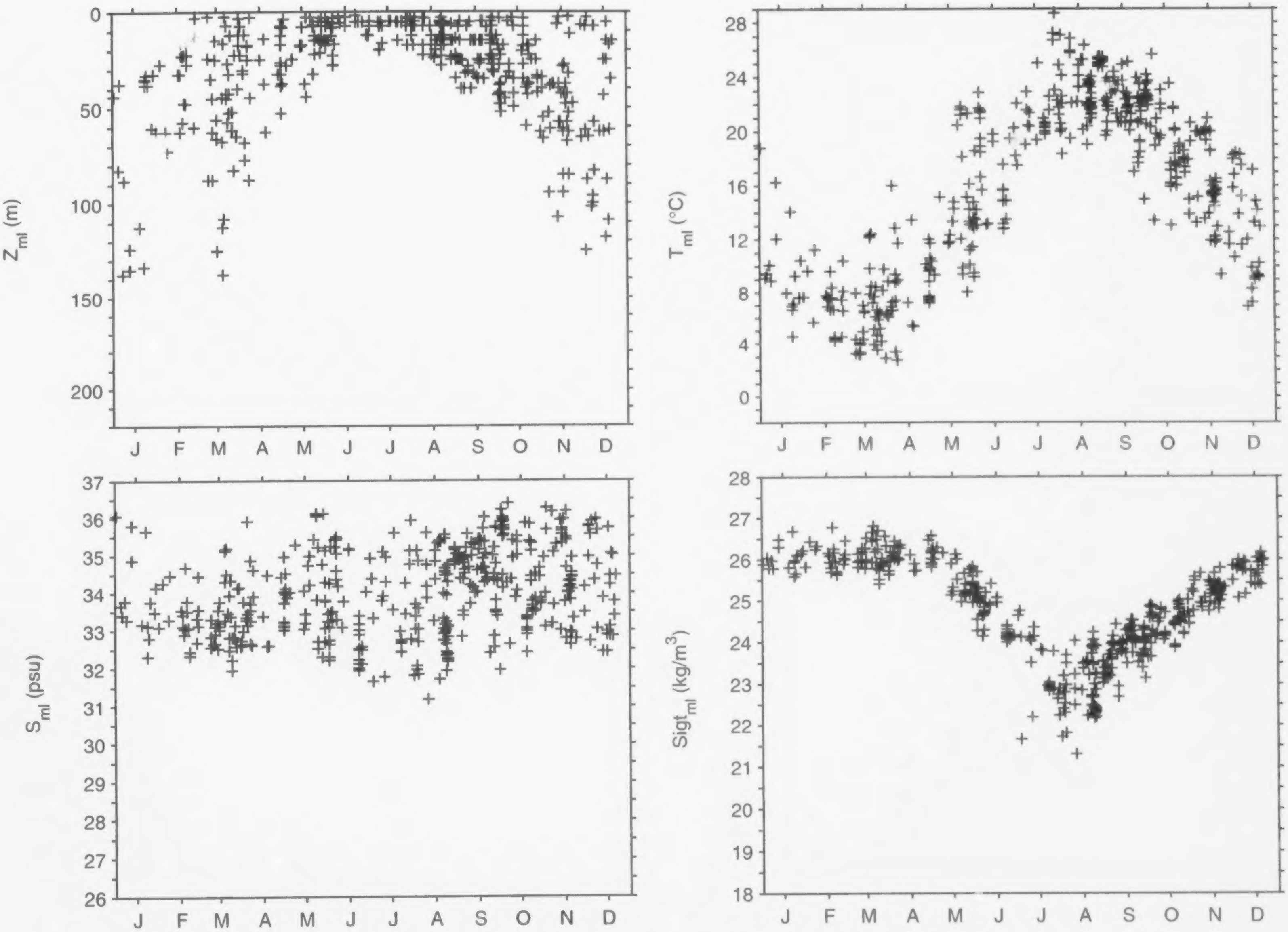

Figure 65b. Calculated mixed layer characteristics for SS62.

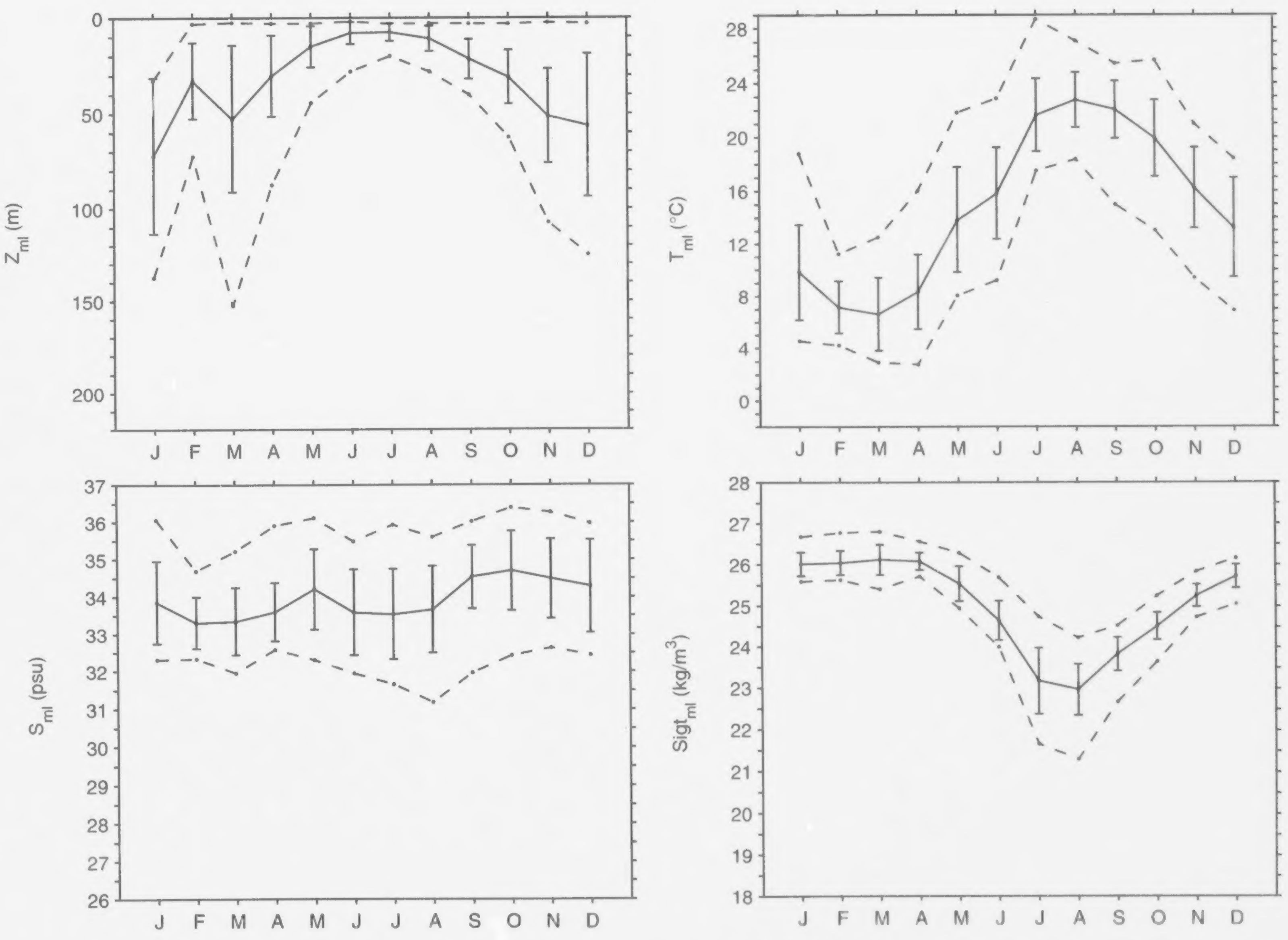

Figure 65c. Monthly statistics of mixed layer characteristics for SS62 (– : mean±sd; –– : min,max).

Table 63. Monthly statistics of mixed layer characteristics for SS62.

Profiles extracted (#) : 840 Profiles retained (#) : 480 Profiles rejected (%) : 42.9
Mean seabed depth (m) for subregion : 1949.4 Mean sounding depth (m) for profiles : 1174.8

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	17	22	41	30	35	44	26	69	63	59	46	28
Mixed layer depth : Z_ml (m)												
mean	72.32	32.75	52.76	30.21	14.97	7.99	7.59	10.86	21.50	30.88	51.29	56.26
median	60.50	25.25	45.00	25.75	14.50	5.50	5.50	7.50	24.50	34.00	50.25	61.58
min	32.50	3.25	2.50	3.00	3.00	1.90	3.25	3.00	3.15	3.25	2.50	3.00
max	137.50	72.50	152.50	87.50	44.25	27.90	20.00	28.00	40.00	62.50	107.50	125.00
s.d.	41.11	19.79	38.32	21.07	10.66	5.76	4.61	6.59	10.28	14.00	24.72	37.49
Mixed layer temperature : T_ml (deg.C)												
mean	9.82	7.15	6.61	8.32	13.80	15.80	21.64	22.76	22.04	19.92	16.22	13.21
median	9.13	7.46	6.33	7.58	12.33	14.91	20.83	22.20	22.06	20.07	15.63	13.29
min	4.54	4.21	2.91	2.77	8.04	9.20	17.51	18.35	15.00	13.04	9.37	6.90
max	18.79	11.22	12.51	16.02	21.83	22.88	28.67	27.08	25.44	25.67	20.99	18.42
s.d.	3.65	2.00	2.80	2.86	3.98	3.43	2.70	2.03	2.13	2.84	3.01	3.77
Mixed layer salinity : S_ml (psu)												
mean	33.85	33.31	33.35	33.60	34.21	33.59	33.54	33.67	34.54	34.70	34.49	34.29
median	33.48	33.20	33.10	33.36	34.05	33.39	33.38	33.32	34.70	34.67	34.33	34.41
min	32.31	32.33	31.95	32.59	32.30	31.95	31.66	31.19	31.96	32.43	32.63	32.44
max	36.06	34.69	35.22	35.91	36.11	35.49	35.94	35.61	36.02	36.39	36.27	35.97
s.d.	1.10	0.69	0.90	0.78	1.07	1.15	1.21	1.16	0.85	1.06	1.06	1.24
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	26.01	26.04	26.12	26.08	25.54	24.65	23.18	22.97	23.84	24.52	25.26	25.72
median	25.98	26.01	25.99	26.03	25.43	24.65	22.94	22.97	23.95	24.58	25.25	25.79
min	25.59	25.63	25.41	25.72	24.95	24.00	21.66	21.30	22.68	23.65	24.74	25.06
max	26.68	26.77	26.80	26.57	26.29	25.70	24.75	24.23	24.54	25.26	25.84	26.16
s.d.	0.29	0.30	0.37	0.21	0.42	0.48	0.80	0.62	0.41	0.33	0.27	0.28

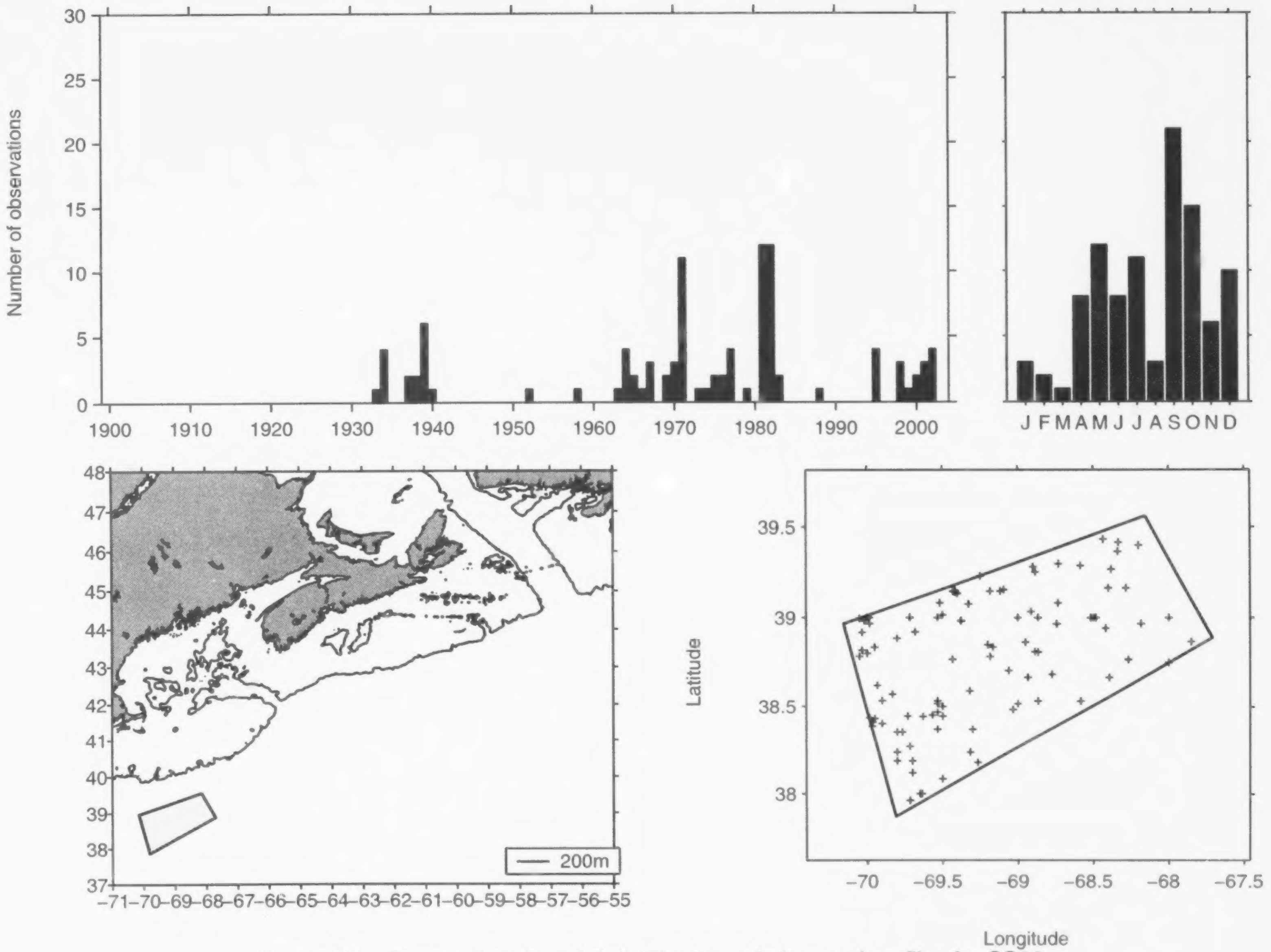

Figure 66a. Temporal and spatial distributions of observed profiles for SS63.

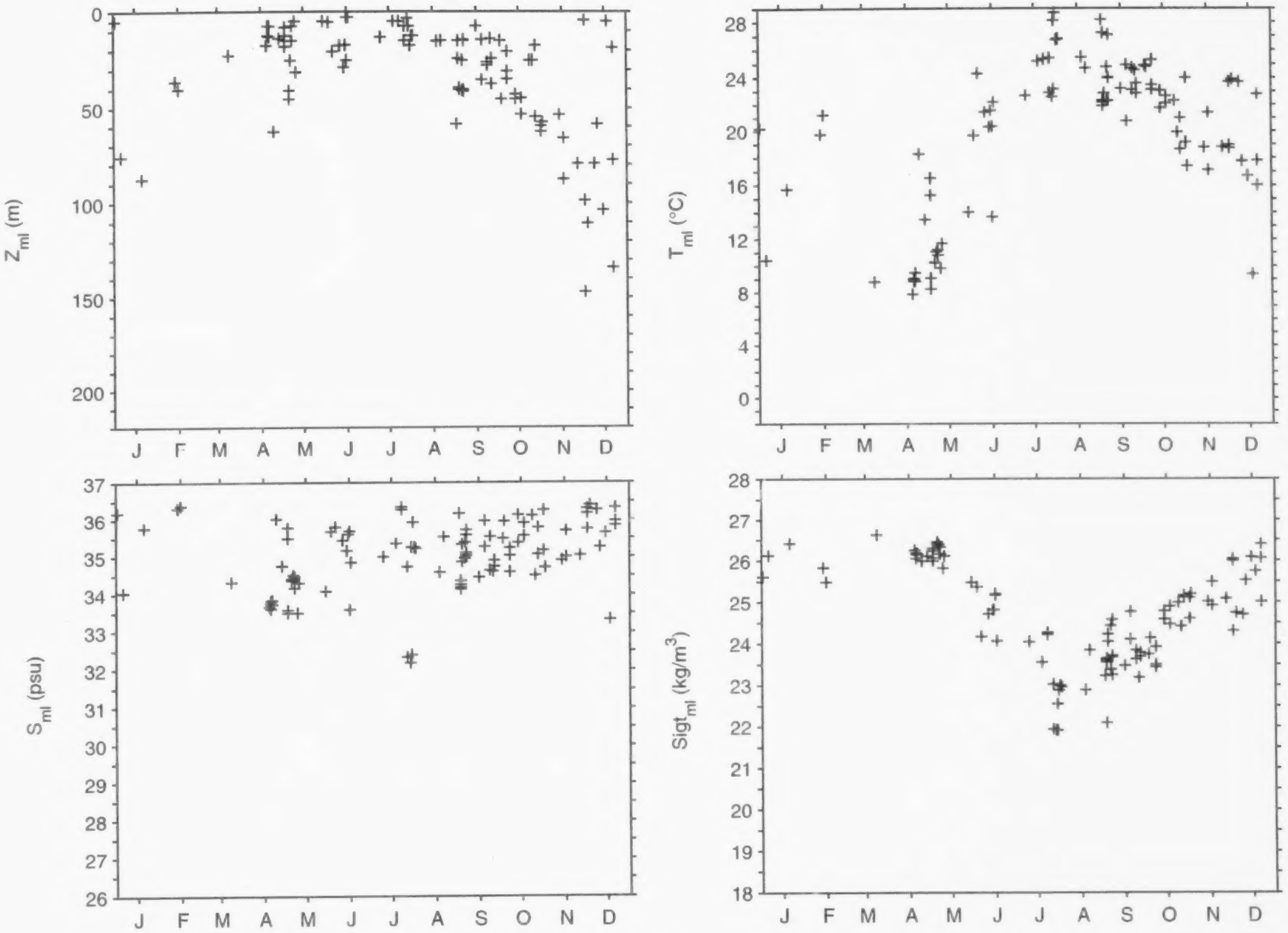

Figure 66b. Calculated mixed layer characteristics for SS63.

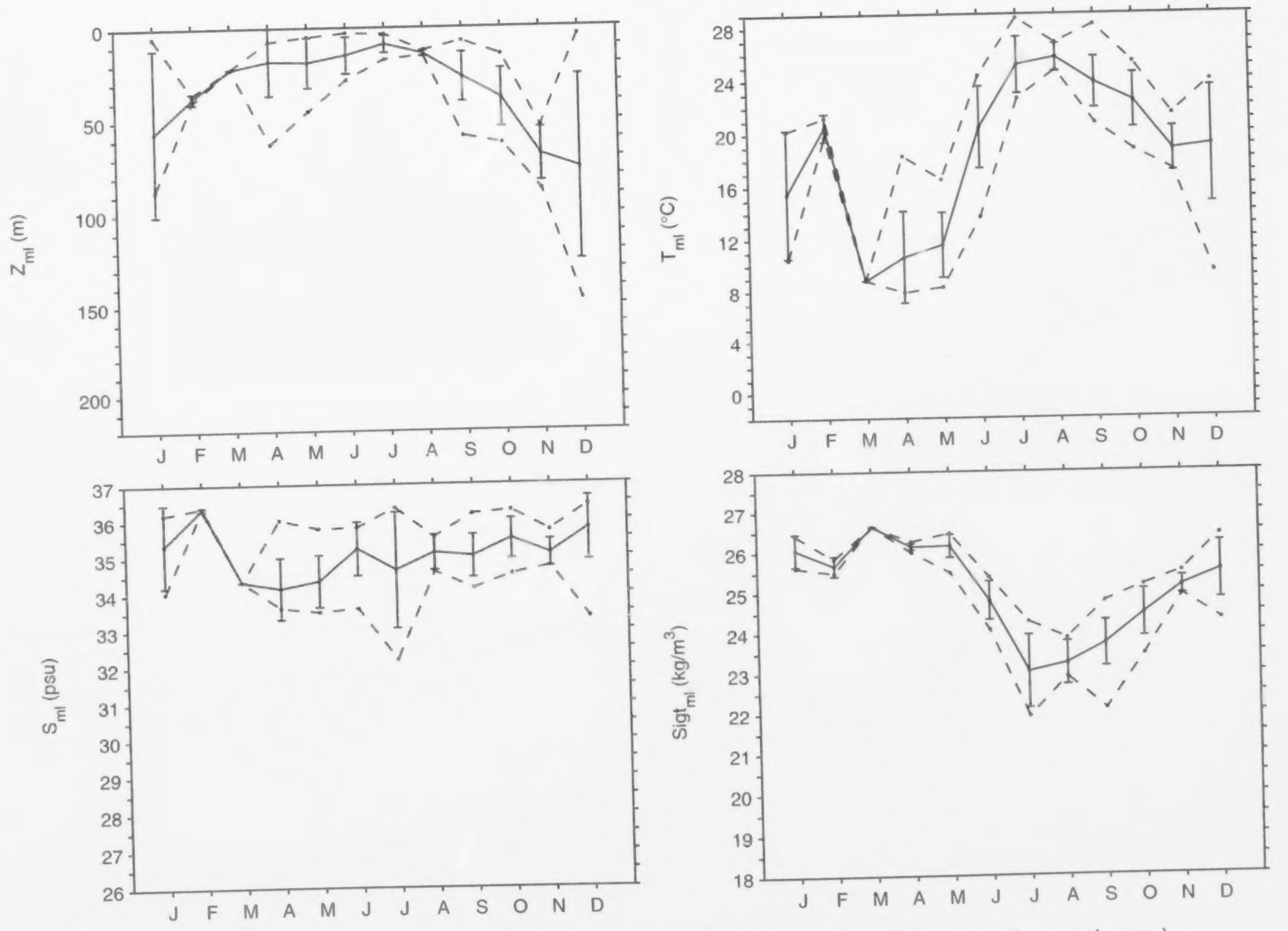

Figure 66c. Monthly statistics of mixed layer characteristics for SS63 (– : mean±sd; –– : min,max).

Table 64. Monthly statistics of mixed layer characteristics for SS63.

Profiles extracted (#) : 264 Profiles retained (#) : 100 Profiles rejected (%) : 62.1
Mean seabed depth (m) for subregion : 3378.2 Mean sounding depth (m) for profiles : 3278.8

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	3	2	1	8	12	8	11	3	21	15	5	11
Mixed layer depth : Z_ml (m)												
mean	56.17	38.00	22.50	18.38	18.96	15.03	9.02	14.25	27.05	38.32	68.80	76.09
median	76.00	38.00	22.50	12.75	15.00	17.38	7.50	15.00	25.00	42.50	66.00	79.50
min	5.00	36.00	22.50	7.50	5.00	3.00	3.50	12.50	7.50	15.00	53.50	4.50
max	87.50	40.00	22.50	62.50	45.00	28.50	17.50	15.25	58.50	62.50	87.50	147.00
s.d.	NaN	NaN	NaN	18.13	13.60	10.01	4.73	NaN	13.19	15.56	14.44	49.64
Mixed layer temperature : T_ml (deg.C)												
mean	15.44	20.48	8.80	10.60	11.52	20.42	25.10	25.65	23.76	22.41	18.70	19.04
median	15.70	20.48	8.80	8.98	10.94	20.88	25.33	25.48	23.21	22.64	18.79	18.72
min	10.44	19.74	8.80	7.87	8.27	13.68	22.58	24.70	20.75	18.66	17.11	9.39
max	20.19	21.21	8.80	18.29	16.49	24.29	28.67	26.78	28.16	25.29	21.39	23.88
s.d.	NaN	NaN	NaN	3.53	2.49	3.08	2.13	NaN	1.90	2.04	1.69	4.38
Mixed layer salinity : S_ml (psu)												
mean	35.34	36.35	34.33	34.15	34.35	35.23	34.65	35.12	35.01	35.48	35.07	35.75
median	35.78	36.35	34.33	33.78	34.34	35.53	35.25	35.22	34.96	35.49	35.00	35.97
min	34.05	36.31	34.33	33.62	33.51	33.60	32.19	34.59	34.14	34.51	34.72	33.33
max	36.19	36.38	34.33	36.03	35.78	35.80	36.35	35.53	36.17	36.26	35.70	36.40
s.d.	NaN	NaN	NaN	0.84	0.71	0.73	1.58	NaN	0.58	0.55	0.37	0.88
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	26.05	25.66	26.62	26.13	26.15	24.79	23.02	23.23	23.71	24.45	25.14	25.51
median	26.13	25.66	26.62	26.15	26.20	24.81	23.00	22.96	23.67	24.58	25.08	25.75
min	25.62	25.49	26.62	25.99	25.48	24.06	21.91	22.89	22.09	23.44	24.92	24.30
max	26.41	25.83	26.62	26.25	26.45	25.37	24.26	23.84	24.77	25.16	25.49	26.40
s.d.	NaN	NaN	NaN	0.08	0.28	0.48	0.90	NaN	0.57	0.59	0.22	0.70

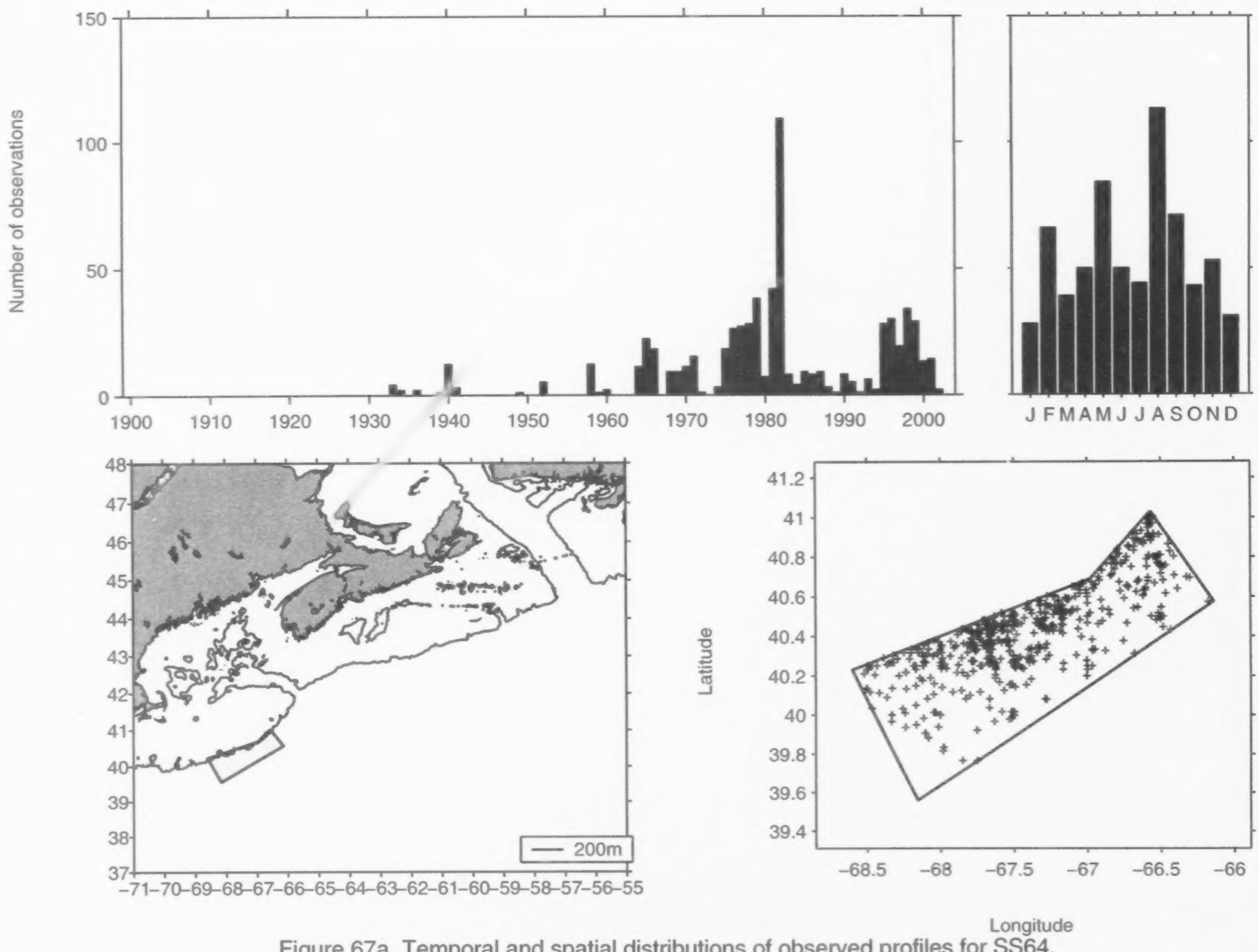

Figure 67a. Temporal and spatial distributions of observed profiles for SS64.

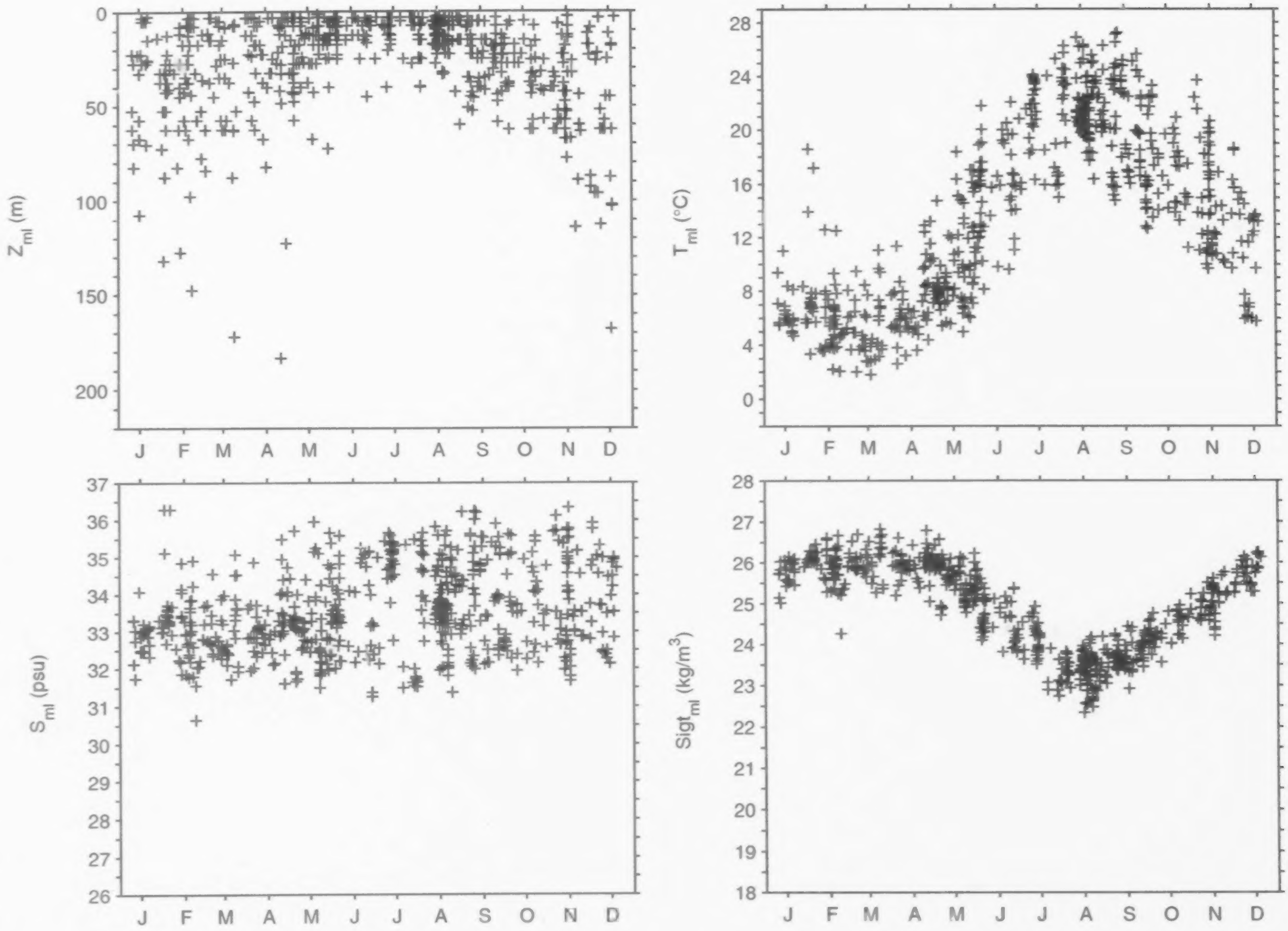

Figure 67b. Calculated mixed layer characteristics for SS64.

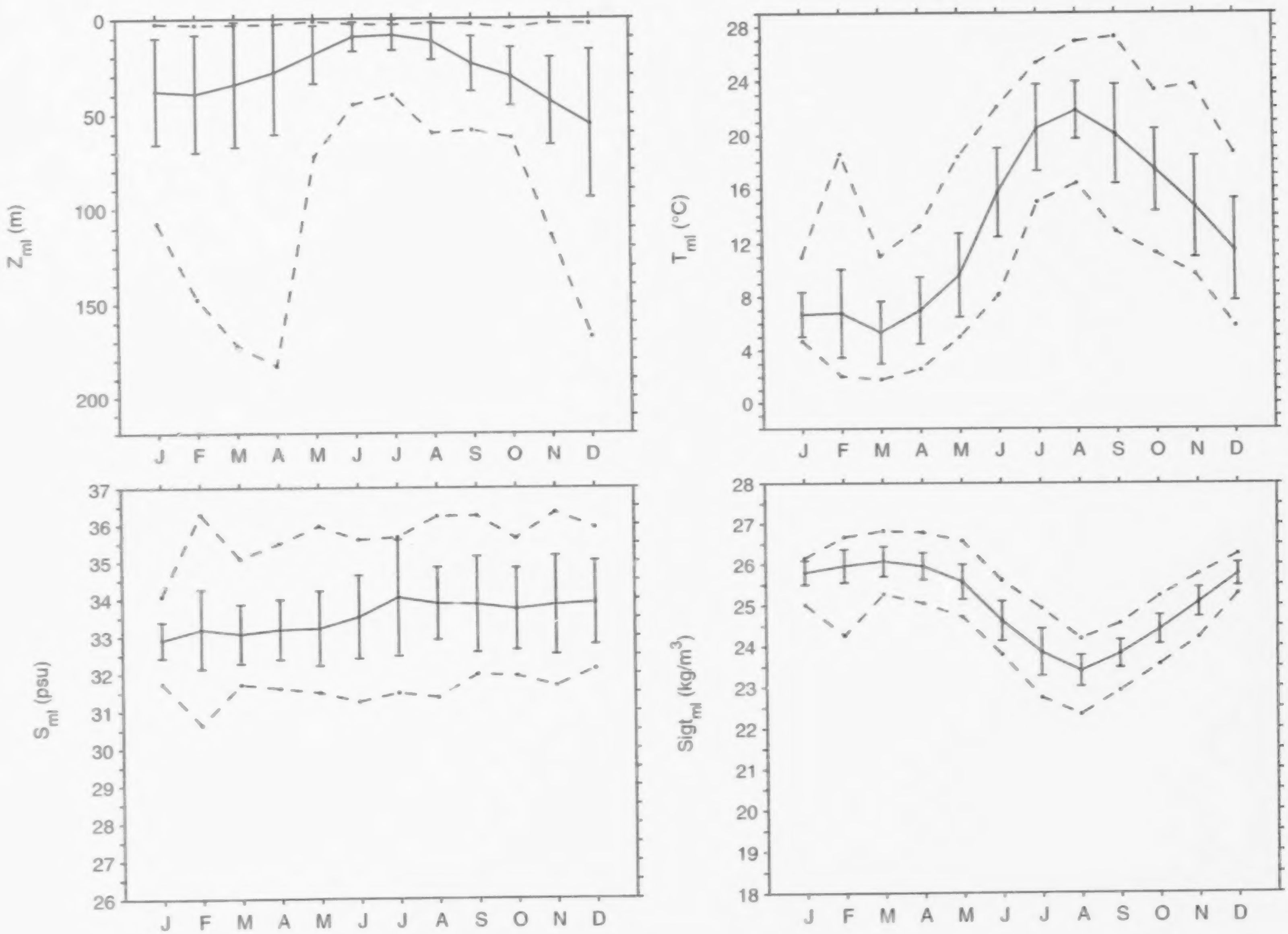

Figure 67c. Monthly statistics of mixed layer characteristics for SS64 (– : mean±sd; –– : min,max).

Table 65. Monthly statistics of mixed layer characteristics for SS64.

Profiles extracted (#) : 825   Profiles retained (#) : 672   Profiles rejected (%) : 18.5
Mean seabed depth (m) for subregion : 1714.4   Mean sounding depth (m) for profiles : 879.9

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	28	65	40	50	84	50	44	113	71	43	52	32
Mixed layer depth : Z_ml (m)												
mean	37.88	39.26	34.44	28.33	18.90	9.49	8.67	11.93	23.79	30.53	43.42	55.44
median	27.50	32.50	26.00	21.95	15.00	7.50	7.50	8.00	22.50	27.50	42.50	60.00
min	2.50	3.25	3.25	3.00	1.50	2.90	3.25	2.50	3.00	5.00	2.50	3.00
max	107.50	147.50	172.00	183.25	72.50	45.00	40.00	60.00	58.50	62.50	114.00	167.75
s.d.	27.90	30.89	32.78	32.28	15.27	7.64	7.99	9.78	14.33	15.14	22.86	38.86
Mixed layer temperature : T_ml (deg.C)												
mean	6.69	6.77	5.33	6.98	9.60	15.73	20.50	21.82	20.04	17.38	14.68	11.47
median	5.96	6.52	4.81	6.27	8.42	15.99	21.21	21.32	19.95	17.37	13.82	11.95
min	4.70	2.05	1.80	2.60	4.99	8.14	15.01	16.38	12.84	11.25	9.67	5.80
max	11.00	18.57	11.05	13.20	18.37	22.07	25.30	26.89	27.24	23.33	23.71	18.65
s.d.	1.66	3.30	2.33	2.49	3.12	3.27	3.22	2.11	3.69	3.07	3.73	3.78
Mixed layer salinity : S_ml (psu)												
mean	32.91	33.19	33.07	33.19	33.22	33.53	34.04	33.88	33.86	33.73	33.84	33.90
median	32.98	33.20	32.86	33.06	33.20	33.36	34.86	33.77	33.88	33.69	33.54	33.84
min	31.73	30.64	31.72	31.61	31.50	31.26	31.49	31.37	31.99	31.95	31.68	32.13
max	34.08	36.29	35.08	35.49	35.96	35.59	35.67	36.23	36.24	35.63	36.33	35.93
s.d.	0.48	1.06	0.79	0.80	1.00	1.11	1.55	0.97	1.28	1.09	1.32	1.12
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.80	25.96	26.07	25.95	25.57	24.62	23.85	23.40	23.82	24.41	25.08	25.76
median	25.87	26.06	26.11	25.94	25.63	24.60	23.86	23.48	23.74	24.37	25.21	25.78
min	25.01	24.26	25.27	25.05	24.72	23.79	22.74	22.34	22.91	23.56	24.21	25.29
max	26.15	26.67	26.83	26.79	26.58	25.61	24.93	24.19	24.56	25.23	25.76	26.25
s.d.	0.29	0.41	0.37	0.33	0.42	0.48	0.58	0.38	0.34	0.36	0.36	0.28

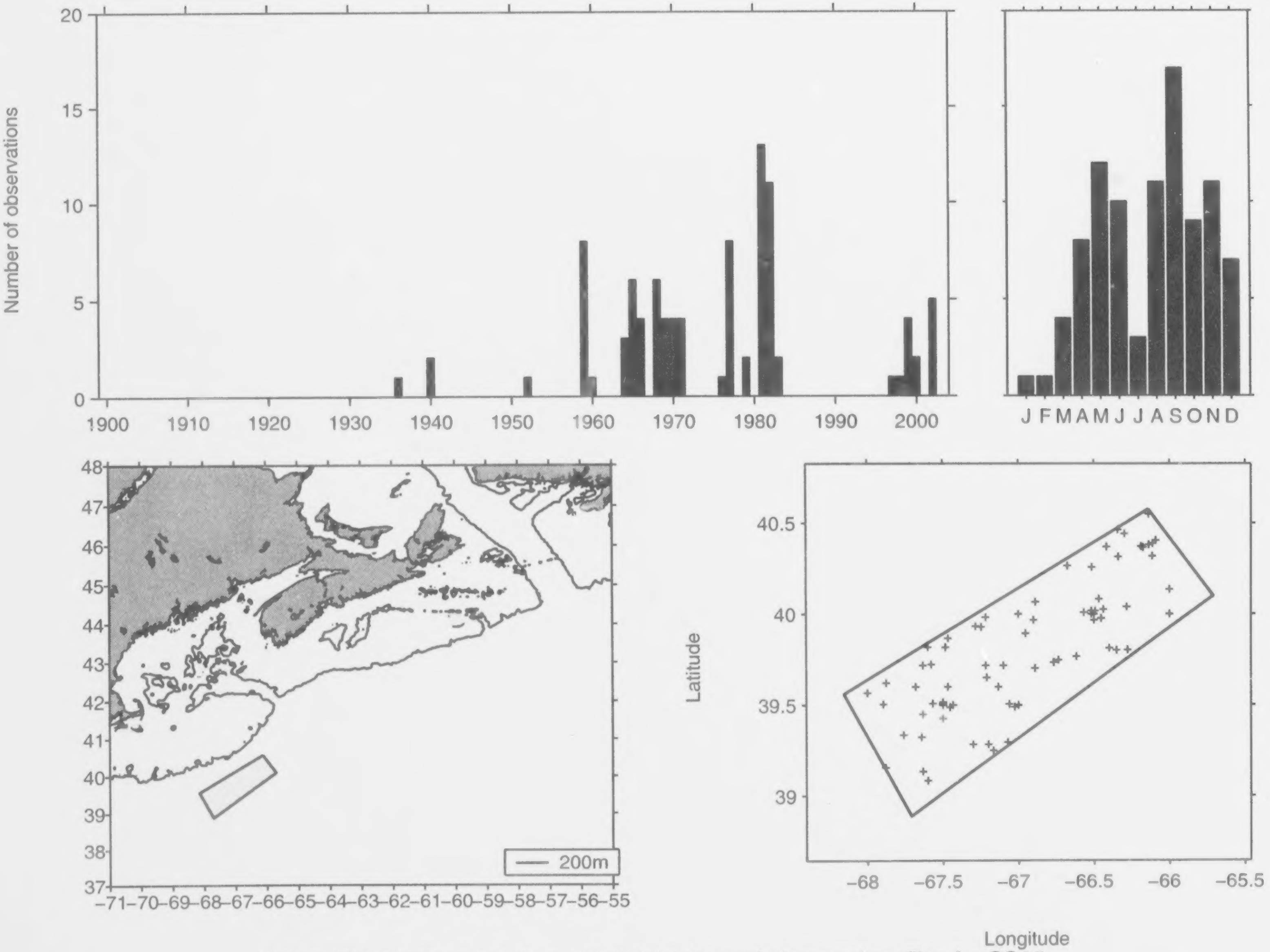

Figure 68a. Temporal and spatial distributions of observed profiles for SS65.

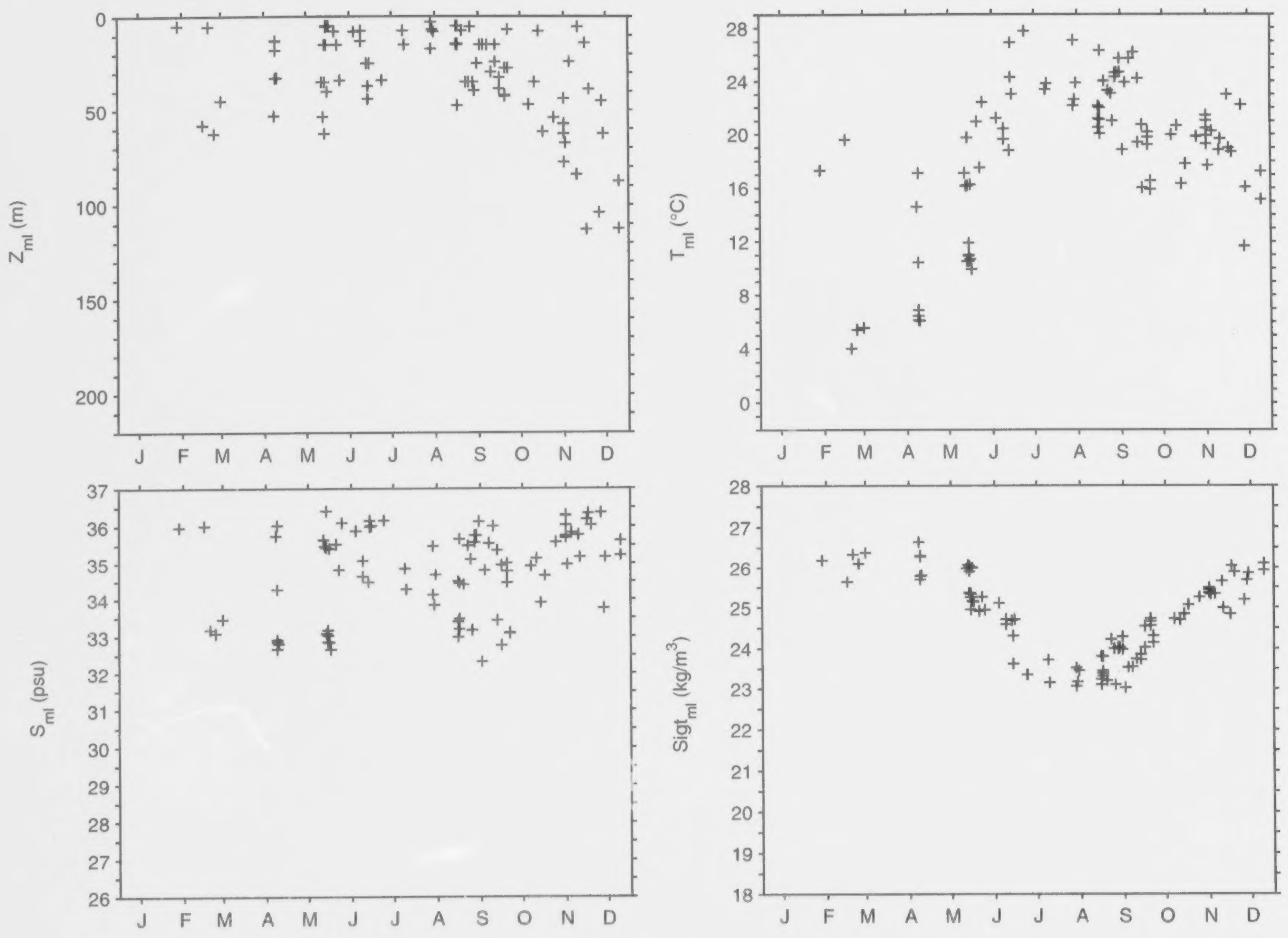

Figure 68b. Calculated mixed layer characteristics for SS65.

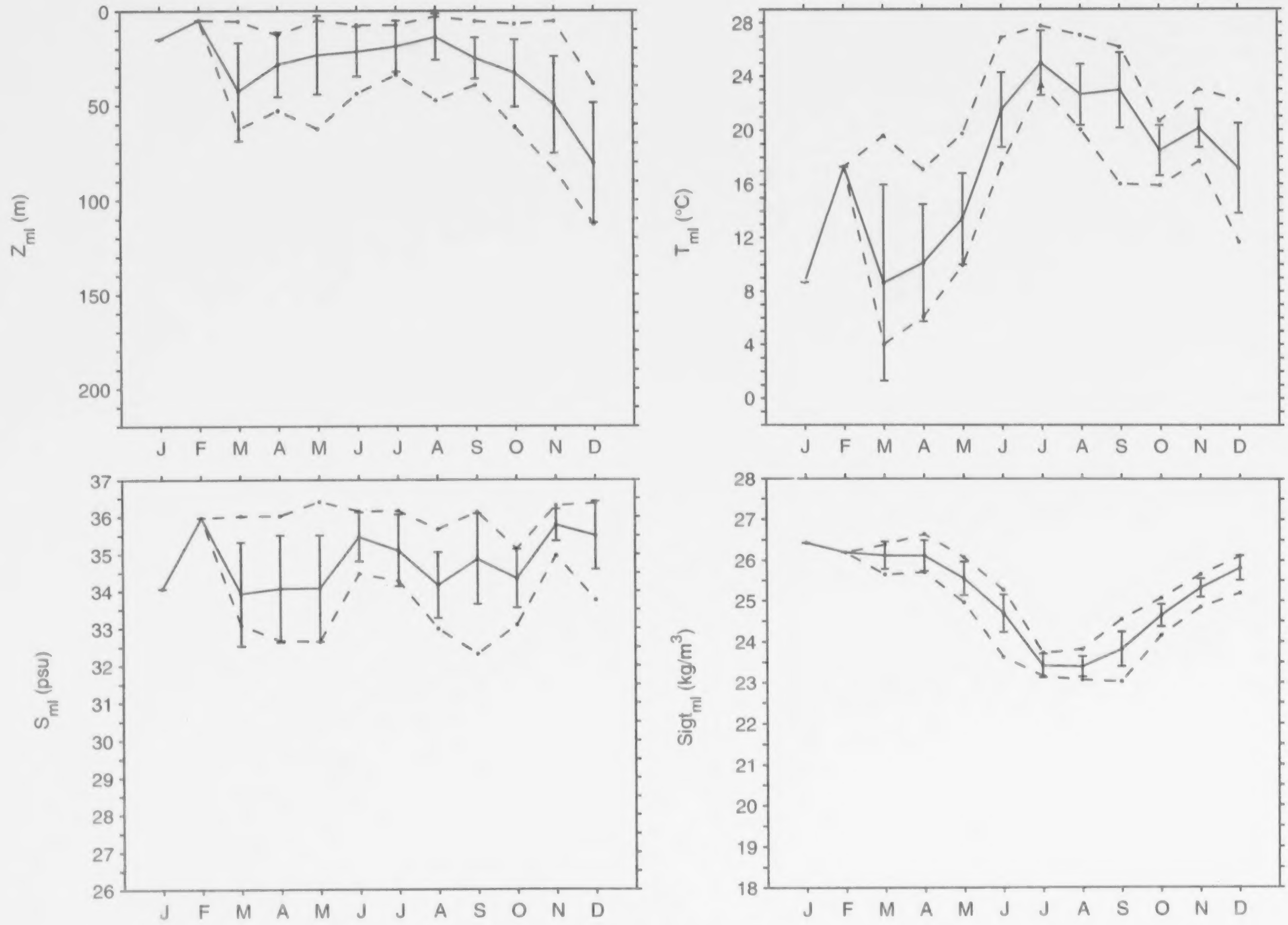

Figure 68c. Monthly statistics of mixed layer characteristics for SS65 (– : mean±sd; –– : min,max).

Table 66. Monthly statistics of mixed layer characteristics for SS65.

Profiles extracted (#) : 146   Profiles retained (#) : 94   Profiles rejected (%) : 35.6
Mean seabed depth (m) for subregion : 3436.8   Mean sounding depth (m) for profiles : 3281.0

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	1	1	4	8	12	10	3	11	17	9	11	7
Mixed layer depth : Z_ml (m)												
mean	15.00	5.00	42.75	28.52	23.46	21.64	18.83	13.78	25.13	33.08	49.77	80.46
median	15.00	5.00	51.50	25.27	15.00	20.00	15.00	14.50	25.00	35.00	57.25	87.50
min	15.00	5.00	5.50	12.75	5.00	7.50	7.50	3.00	5.50	7.00	5.50	38.75
max	15.00	5.00	62.50	53.00	62.50	44.00	34.00	47.50	39.50	61.50	84.00	113.00
s.d.	NaN	NaN	NaN	17.20	20.88	13.35	NaN	12.26	11.06	17.88	25.47	31.65
Mixed layer temperature : T_ml (deg.C)												
mean	8.69	17.30	8.64	10.12	13.41	21.50	24.97	22.62	22.96	18.48	20.12	17.15
median	8.69	17.30	5.48	8.65	11.45	21.06	23.81	22.10	24.00	19.22	19.91	17.27
min	8.69	17.30	4.00	6.09	9.93	17.50	23.36	20.03	16.02	15.90	17.70	11.67
max	8.69	17.30	19.58	17.09	19.73	26.88	27.75	27.06	26.17	20.65	22.99	22.21
s.d.	NaN	NaN	NaN	4.39	3.40	2.76	NaN	2.27	2.81	1.85	1.39	3.33
Mixed layer salinity : S_ml (psu)												
mean	34.06	35.97	33.93	34.07	34.09	35.47	35.10	34.16	34.87	34.34	35.78	35.50
median	34.06	35.97	33.32	33.59	33.12	35.70	34.86	34.13	35.37	34.66	35.78	35.63
min	34.06	35.97	33.08	32.67	32.66	34.48	34.28	32.99	32.33	33.09	34.97	33.76
max	34.06	35.97	36.02	36.03	36.40	36.15	36.16	35.67	36.13	35.14	36.30	36.36
s.d.	NaN	NaN	NaN	1.44	1.43	0.65	NaN	0.89	1.22	0.79	0.43	0.91
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	26.43	26.19	26.12	26.11	25.55	24.69	23.41	23.39	23.82	24.64	25.32	25.82
median	26.43	26.19	26.22	26.05	25.36	24.71	23.35	23.38	23.98	24.70	25.36	25.89
min	26.43	26.19	25.65	25.70	24.95	23.62	23.15	23.06	23.02	24.15	24.84	25.19
max	26.43	26.19	26.39	26.64	26.08	25.26	23.72	23.81	24.54	25.06	25.66	26.11
s.d.	NaN	NaN	NaN	0.38	0.42	0.46	NaN	0.25	0.42	0.27	0.23	0.31

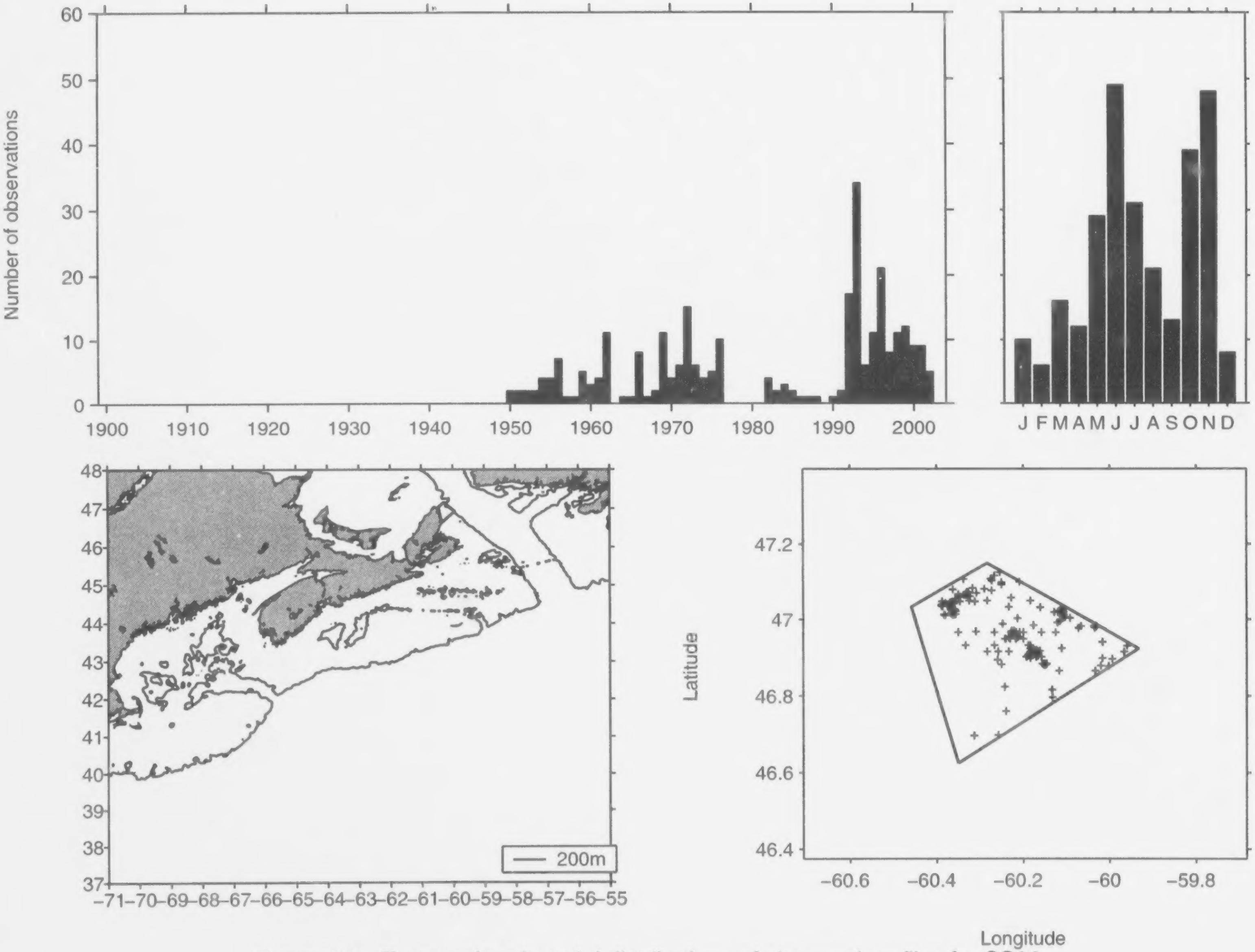

Figure 69a. Temporal and spatial distributions of observed profiles for SS66.

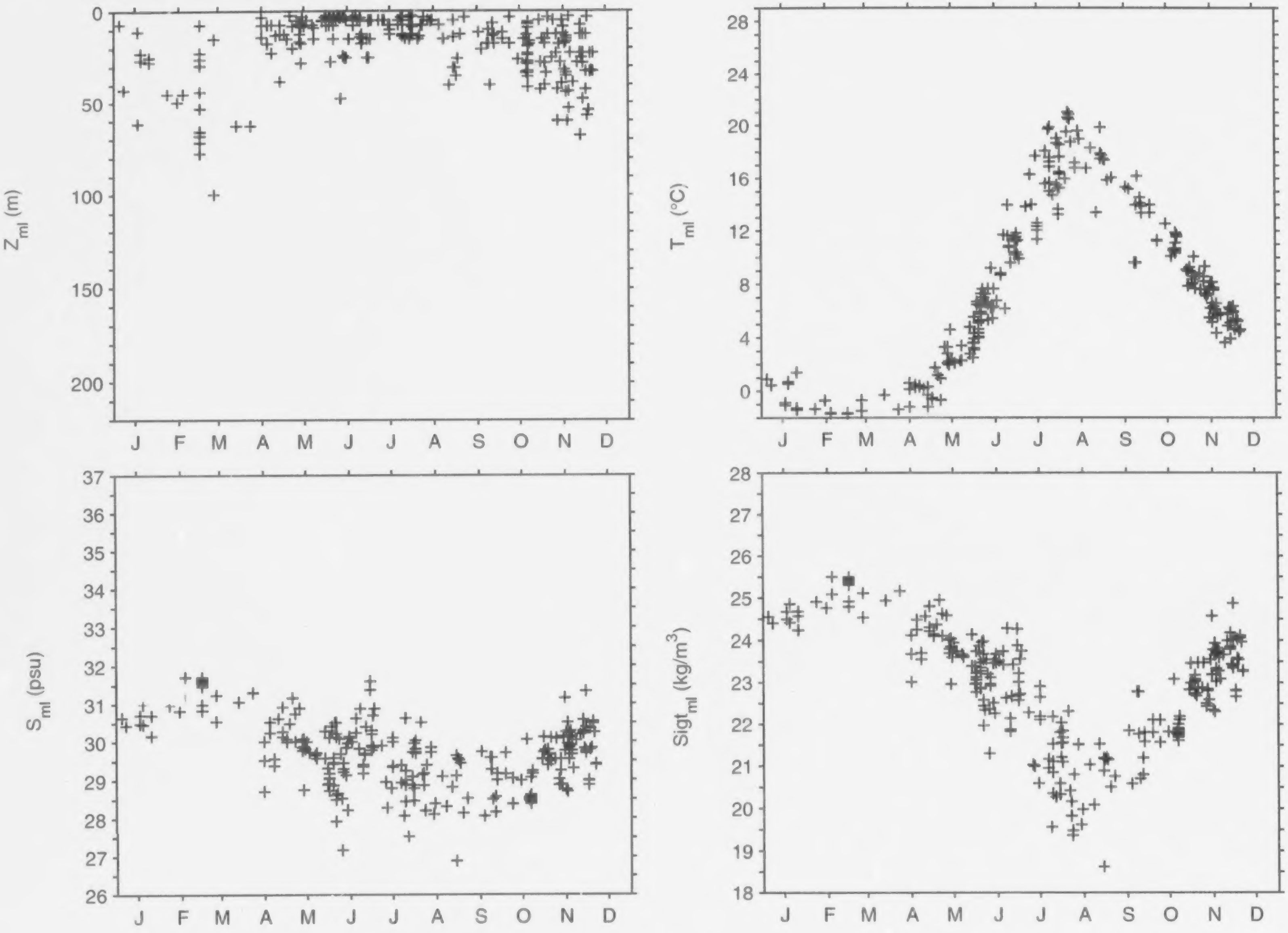

Figure 69b. Calculated mixed layer characteristics for SS66.

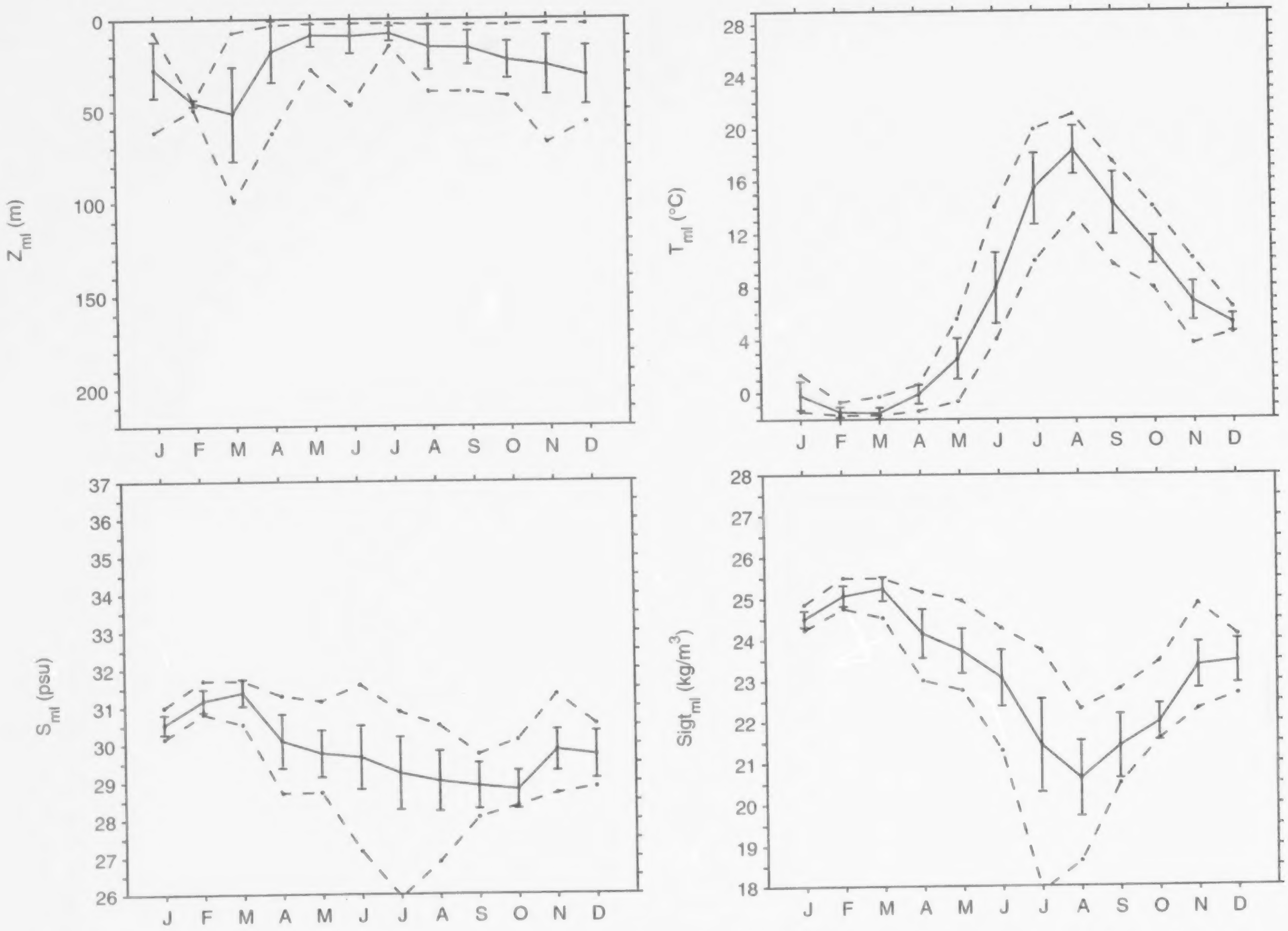

Figure 69c. Monthly statistics of mixed layer characteristics for SS66 (– : mean±sd; –– : min,max).

Table 67. Monthly statistics of mixed layer characteristics for SS66.

Profiles extracted (#) : 326   Profiles retained (#) : 282   Profiles rejected (%) : 13.5
Mean seabed depth (m) for subregion : 119.3   Mean sounding depth (m) for profiles : 128.7

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	10	6	16	12	29	47	33	21	13	39	45	11
Mixed layer depth : Z_ml (m)												
mean	27.40	45.75	51.76	17.82	8.94	9.39	8.01	15.53	16.04	22.79	25.72	31.32
median	25.00	45.00	57.80	12.75	7.90	5.00	7.50	7.75	13.40	23.65	22.50	32.50
min	7.20	45.00	7.50	3.50	2.50	2.50	2.50	3.50	3.50	3.50	3.00	3.30
max	61.55	49.50	99.50	62.50	27.90	47.45	15.00	40.00	40.00	42.50	67.85	57.10
s.d.	15.35	1.84	25.51	16.83	6.15	9.48	4.04	12.32	9.24	10.05	16.11	16.14
Mixed layer temperature : T_ml (deg.C)												
mean	-0.19	-1.45	-1.52	-0.11	2.57	7.88	15.38	18.30	14.25	10.72	6.85	5.19
median	-0.22	-1.64	-1.68	0.23	2.52	6.79	15.60	17.91	14.55	10.59	6.57	5.23
min	-1.41	-1.69	-1.70	-1.39	-0.67	4.01	9.92	13.41	9.60	7.88	3.66	4.47
max	1.40	-0.71	-0.29	0.61	5.55	13.98	19.88	21.02	17.42	13.99	10.07	6.36
s.d.	1.09	0.38	0.41	0.72	1.52	2.68	2.71	1.84	2.35	1.05	1.46	0.65
Mixed layer salinity : S_ml (psu)												
mean	30.55	31.18	31.39	30.10	29.77	29.67	29.24	29.03	28.90	28.80	29.84	29.71
median	30.56	31.19	31.55	30.19	29.81	29.78	29.34	29.14	29.00	28.54	29.82	29.79
min	30.16	30.82	30.55	28.71	28.73	27.17	25.91	26.89	28.06	28.37	28.69	28.86
max	31.00	31.71	31.70	31.30	31.16	31.59	30.88	30.51	29.74	30.12	31.33	30.53
s.d.	0.26	0.30	0.35	0.72	0.62	0.85	0.97	0.80	0.61	0.50	0.55	0.63
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	24.51	25.07	25.24	24.15	23.73	23.07	21.43	20.62	21.41	21.99	23.37	23.47
median	24.52	25.09	25.37	24.23	23.74	23.20	21.53	20.89	21.20	21.82	23.37	23.55
min	24.24	24.76	24.54	23.01	22.77	21.30	17.87	18.62	20.51	21.57	22.30	22.66
max	24.86	25.50	25.50	25.17	24.95	24.28	23.75	22.31	22.79	23.46	24.87	24.11
s.d.	0.20	0.25	0.29	0.59	0.54	0.68	1.13	0.91	0.77	0.44	0.56	0.54

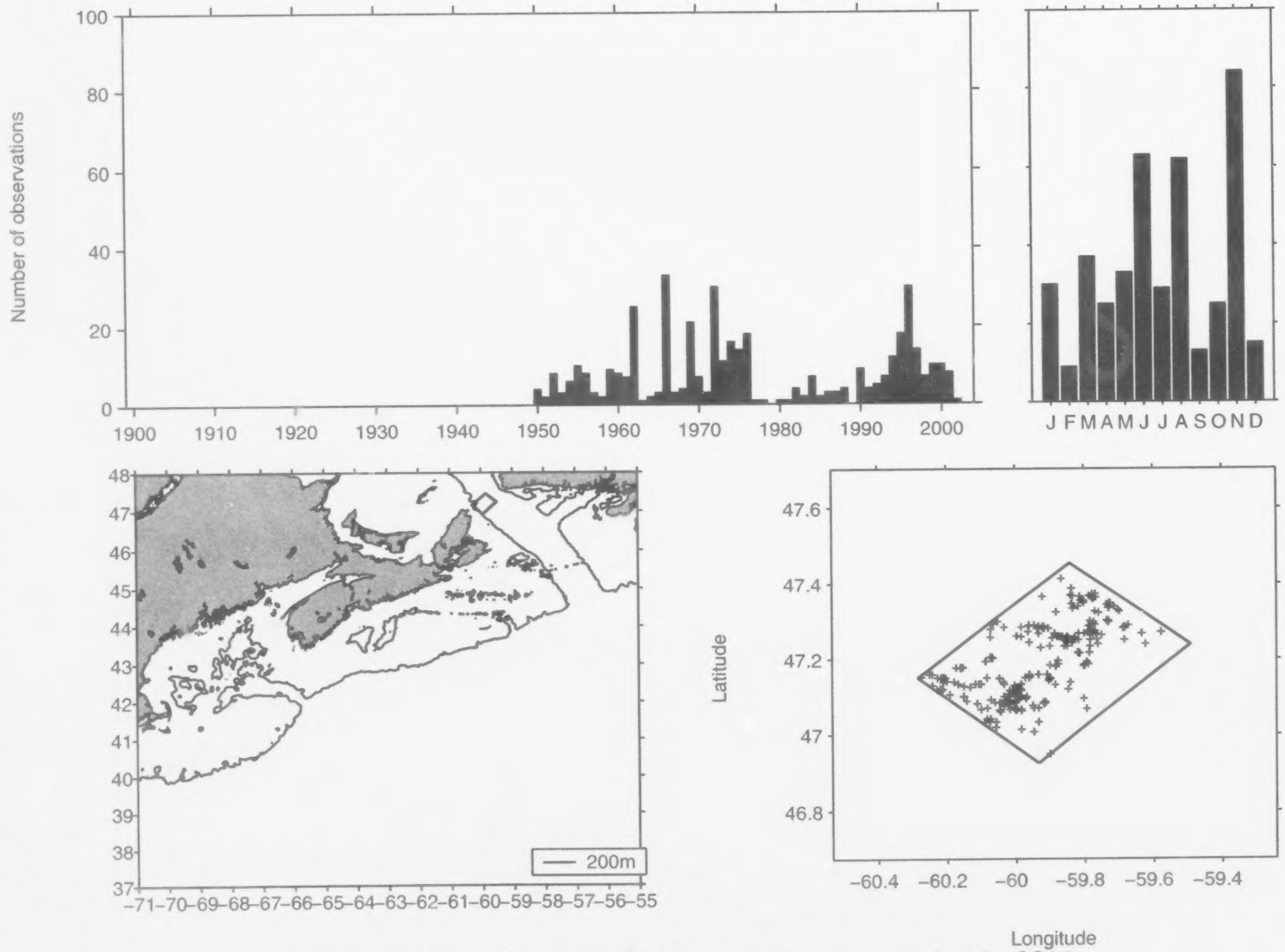

Figure 70a. Temporal and spatial distributions of observed profiles for SS67.

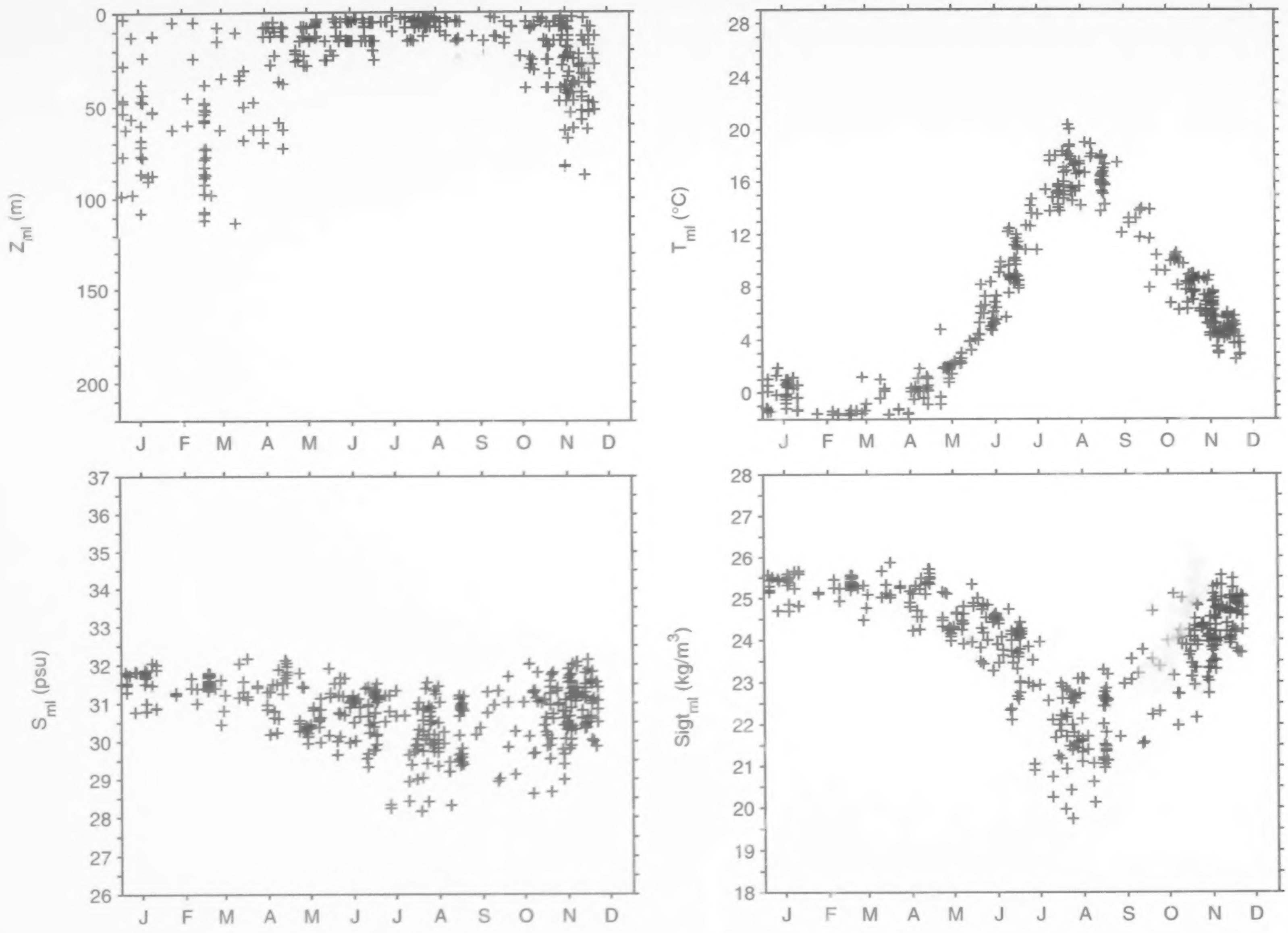

Figure 70b. Calculated mixed layer characteristics for SS67.

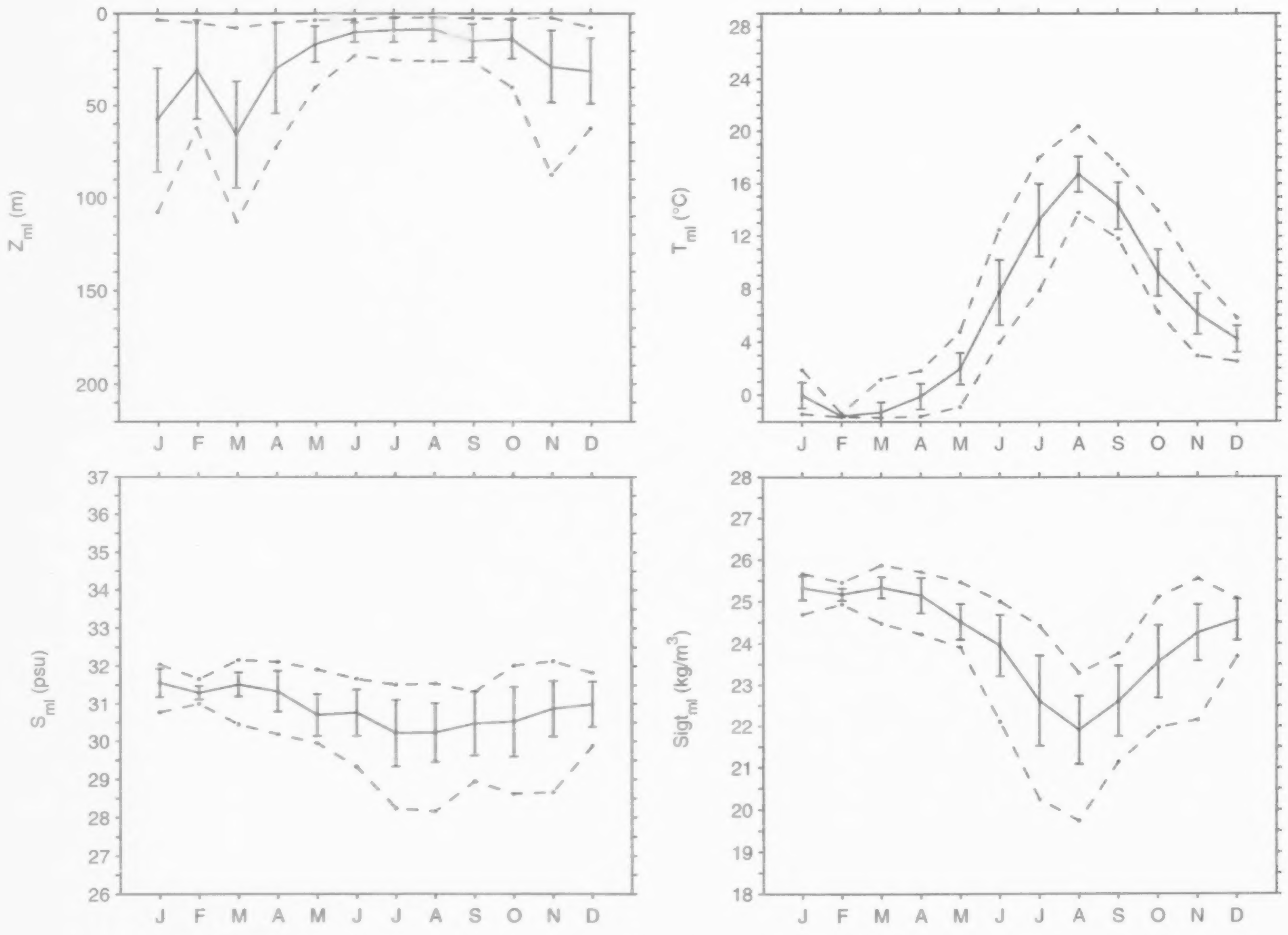

Figure 70c. Monthly statistics of mixed layer characteristics for SS67 (– : mean±sd; –– : min,max).

Table 68. Monthly statistics of mixed layer characteristics for SS67.

Profiles extracted (#) : 482   Profiles retained (#) : 425   Profiles rejected (%) : 11.8
Mean seabed depth (m) for subregion : 390.5   Mean sounding depth (m) for profiles : 394.1

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	30	9	37	25	33	57	35	62	13	25	81	18
Mixed layer depth : Z_ml (m)												
mean	57.68	30.44	65.72	29.65	16.39	10.05	8.85	8.45	14.63	13.76	28.69	31.09
median	55.05	24.00	68.15	12.60	14.00	7.75	5.00	5.25	12.75	8.85	27.10	30.00
min	3.40	5.00	7.75	5.00	3.65	3.30	2.00	2.40	2.50	3.00	2.25	7.50
max	107.80	62.50	113.00	72.75	40.00	22.60	25.00	25.50	25.50	40.00	87.50	62.50
s.d.	28.32	26.86	29.02	24.67	9.63	5.23	6.34	6.32	8.96	10.41	19.68	17.94
Mixed layer temperature : T_ml (deg.C)												
mean	-0.03	-1.59	-1.30	-0.11	2.00	7.74	13.22	16.74	14.32	9.23	6.14	4.24
median	-0.00	-1.60	-1.63	0.12	1.96	7.52	13.80	16.69	14.01	9.77	5.92	4.36
min	-1.44	-1.65	-1.69	-1.61	-0.88	3.99	7.88	13.80	11.81	6.23	2.97	2.54
max	1.89	-1.41	1.20	1.85	4.79	12.49	17.98	20.37	17.47	13.93	8.99	5.80
s.d.	0.97	0.07	0.75	0.97	1.21	2.46	2.77	1.36	1.80	1.76	1.53	0.99
Mixed layer salinity : S_ml (psu)												
mean	31.56	31.30	31.52	31.34	30.71	30.77	30.22	30.23	30.48	30.52	30.87	30.99
median	31.71	31.27	31.55	31.46	30.54	31.01	30.19	30.21	30.80	30.63	30.95	31.07
min	30.77	31.00	30.45	30.19	29.95	29.33	28.24	28.16	28.94	28.62	28.67	29.87
max	32.04	31.66	32.16	32.12	31.91	31.66	31.51	31.54	31.32	32.02	32.13	31.82
s.d.	0.38	0.18	0.32	0.54	0.56	0.62	0.88	0.78	0.85	0.93	0.74	0.60
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.32	25.17	25.33	25.15	24.52	23.95	22.62	21.91	22.62	23.57	24.26	24.57
median	25.43	25.14	25.33	25.25	24.39	24.15	22.75	21.90	22.96	23.71	24.30	24.72
min	24.69	24.93	24.48	24.22	23.91	22.11	20.25	19.74	21.14	21.98	22.16	23.69
max	25.66	25.45	25.87	25.71	25.46	25.00	24.42	23.29	23.77	25.10	25.55	25.07
s.d.	0.29	0.14	0.26	0.42	0.42	0.73	1.09	0.83	0.85	0.87	0.67	0.48

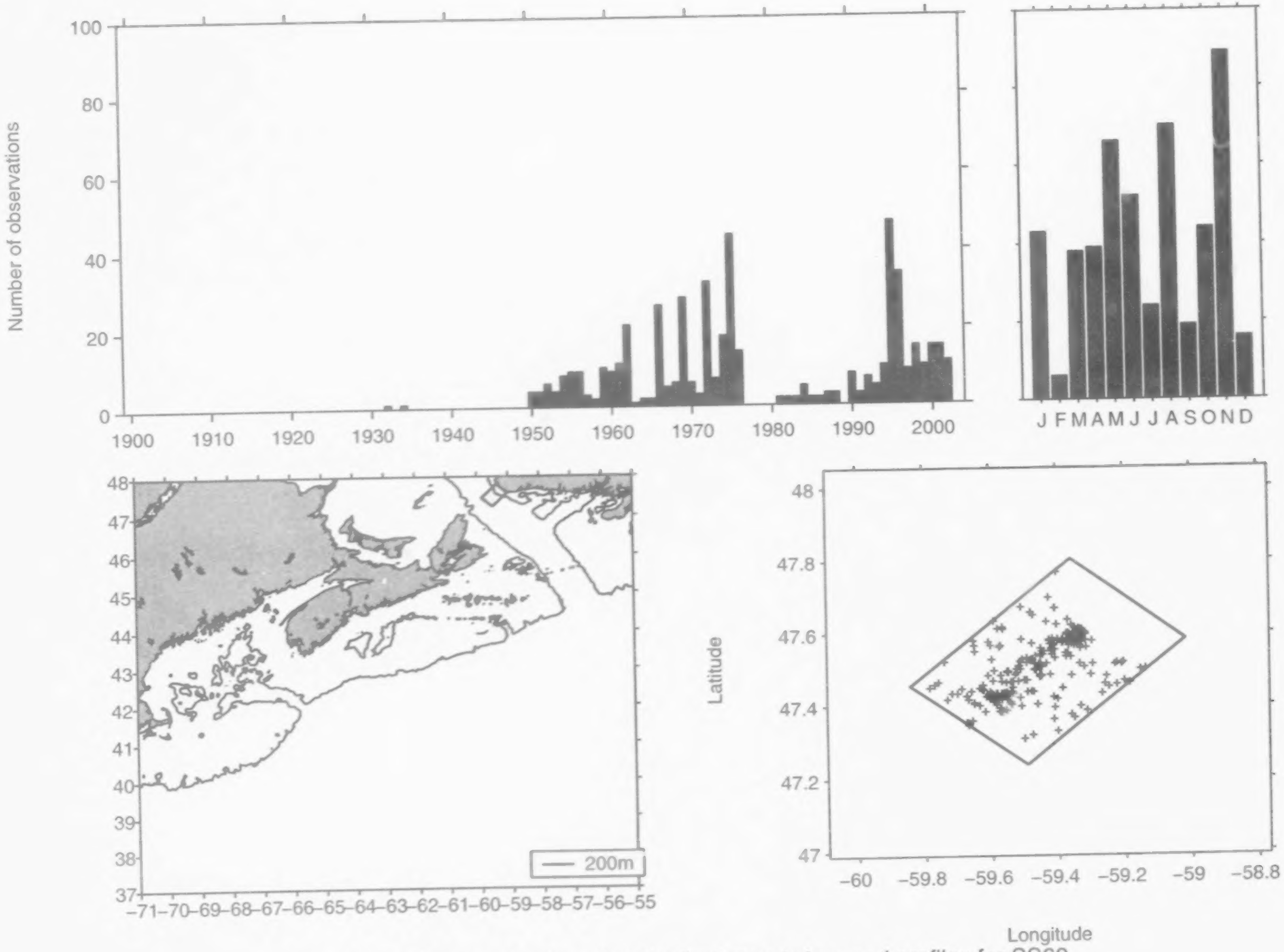

Figure 71a. Temporal and spatial distributions of observed profiles for SS68.

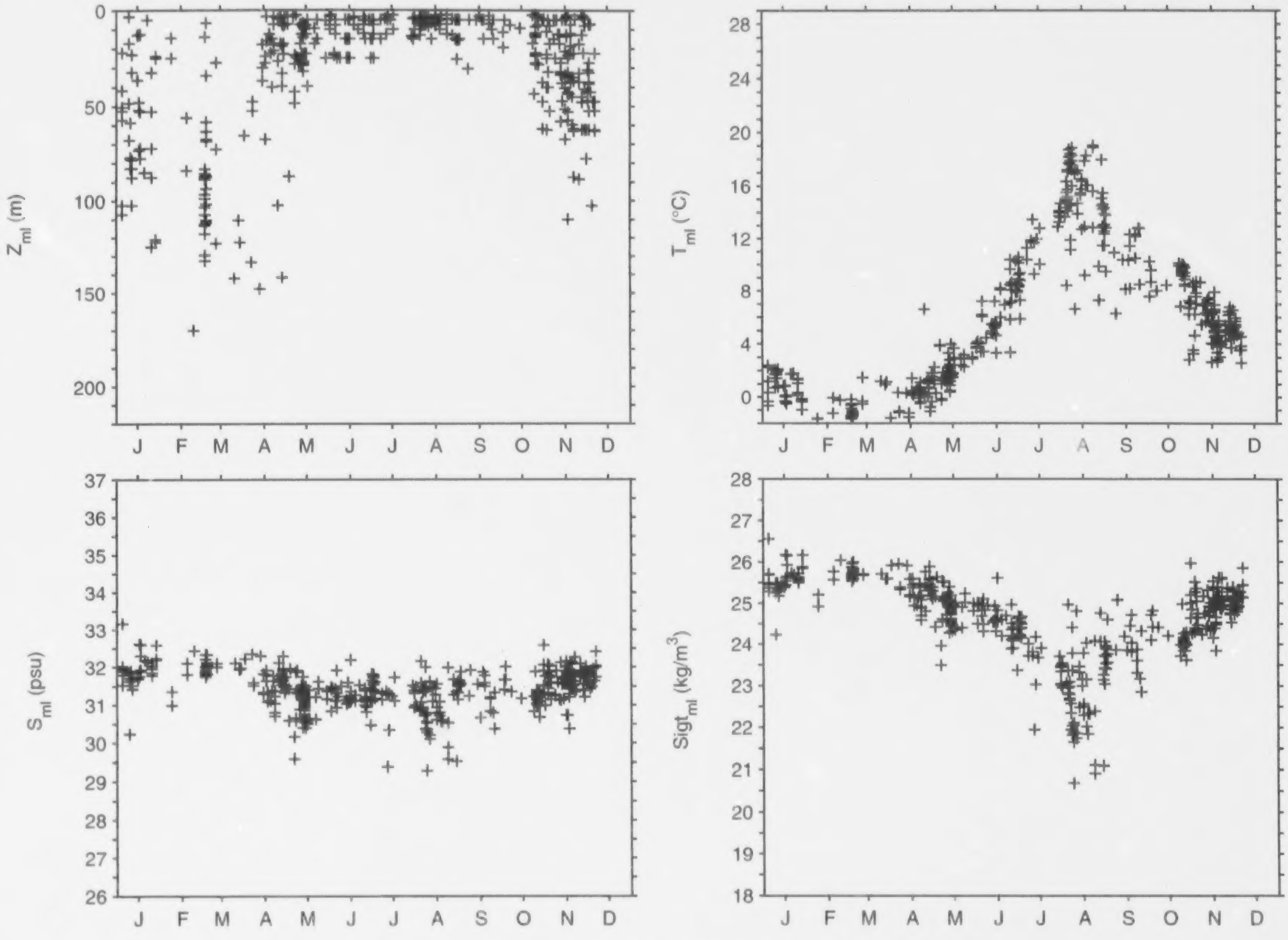

Figure 71b. Calculated mixed layer characteristics for SS68.

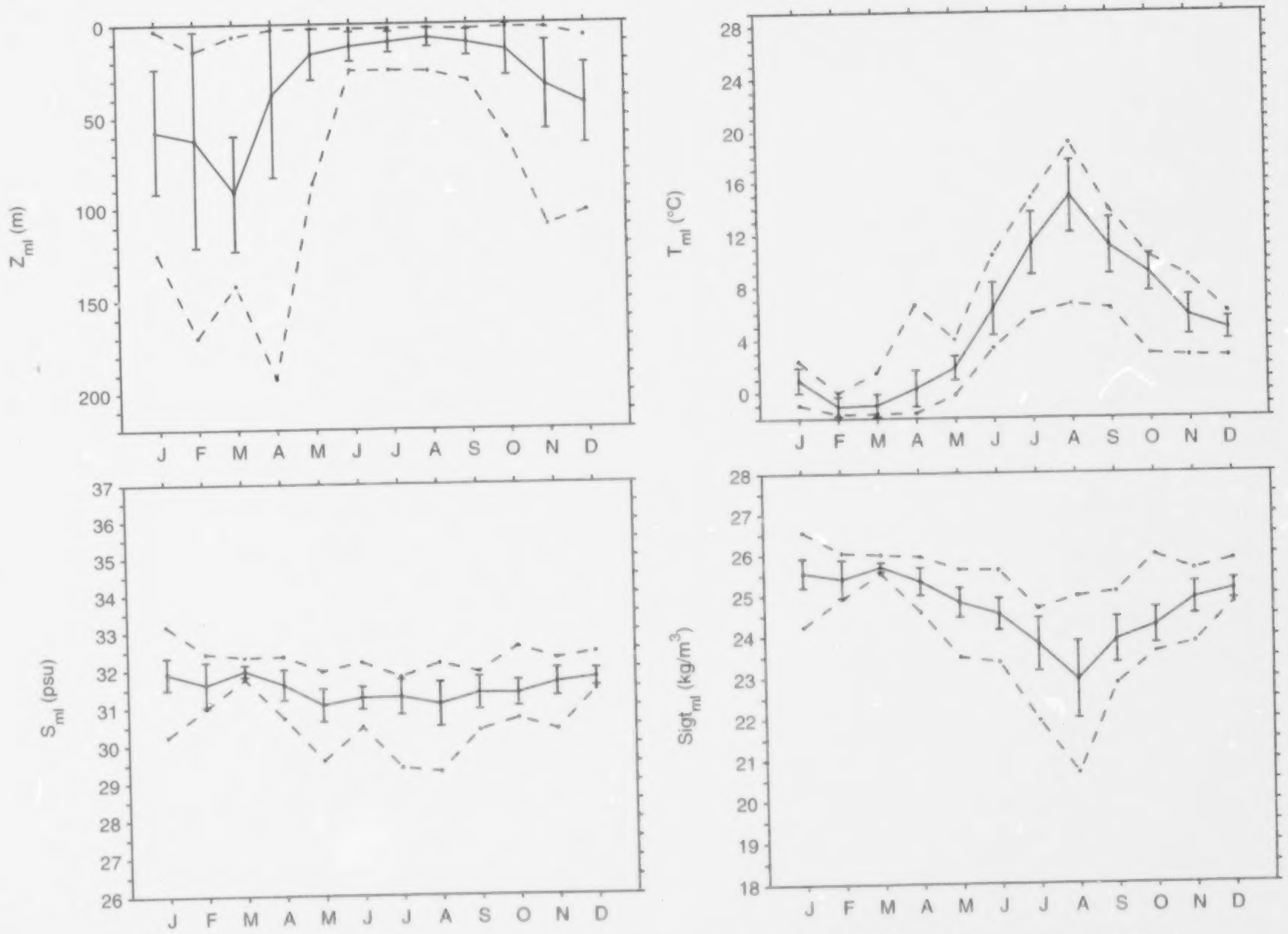

Figure 71c. Monthly statistics of mixed layer characteristics for SS68 (– : mean±sd; -- : min,max).

Table 69. Monthly statistics of mixed layer characteristics for SS68.

Profiles extracted (#) : 557 Profiles retained (#) : 506 Profiles rejected (%) : 9.2
Mean seabed depth (m) for subregion : 334.1 Mean sounding depth (m) for profiles : 306.1

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	43	6	38	39	66	45	31	70	19	44	86	19
Mixed layer depth : Z_ml (m)												
mean	57.64	62.42	91.54	37.86	16.21	12.03	9.80	7.48	10.30	14.33	33.49	43.52
median	52.75	40.50	97.58	21.00	8.82	10.00	10.00	5.50	7.00	10.43	32.65	42.65
min	3.20	14.50	6.70	2.95	2.50	2.50	2.50	2.40	3.00	2.25	2.50	7.20
max	125.00	170.00	142.00	192.50	87.00	25.00	25.00	25.50	30.50	62.00	110.00	102.75
s.d.	34.07	58.61	31.57	45.31	13.76	7.88	5.58	4.85	6.90	13.72	23.96	21.70
Mixed layer temperature : T_ml (deg.C)												
mean	0.93	-1.09	-1.00	0.28	1.82	6.29	11.27	14.88	11.06	9.00	5.73	4.70
median	0.89	-1.44	-1.29	0.30	1.68	6.00	11.70	15.05	11.46	9.59	5.70	4.71
min	-0.98	-1.68	-1.65	-1.61	-0.24	3.33	5.88	6.62	6.30	2.83	2.66	2.60
max	2.38	-0.05	1.49	6.60	3.98	10.39	14.70	19.04	13.82	10.27	8.73	5.95
s.d.	0.96	0.75	0.85	1.37	0.91	1.98	2.38	2.77	2.14	1.45	1.50	0.84
Mixed layer salinity : S_ml (psu)												
mean	31.90	31.61	31.97	31.61	31.06	31.26	31.27	31.08	31.36	31.35	31.63	31.75
median	31.88	31.58	32.00	31.62	31.14	31.19	31.33	31.30	31.55	31.29	31.69	31.74
min	30.24	30.99	31.75	30.71	29.59	30.47	29.38	29.28	30.37	30.68	30.38	31.43
max	33.17	32.43	32.34	32.35	31.96	32.19	31.80	32.16	31.92	32.58	32.26	32.42
s.d.	0.43	0.60	0.15	0.40	0.43	0.30	0.47	0.59	0.44	0.34	0.37	0.23
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.55	25.41	25.69	25.34	24.82	24.54	23.80	22.94	23.91	24.25	24.91	25.13
median	25.49	25.39	25.70	25.34	24.89	24.56	23.81	23.02	23.85	24.13	24.97	25.12
min	24.23	24.92	25.54	24.59	23.49	23.37	21.95	20.68	22.85	23.61	23.84	24.80
max	26.56	26.04	26.00	25.95	25.63	25.61	24.67	24.97	25.08	25.97	25.62	25.86
s.d.	0.36	0.46	0.12	0.34	0.36	0.39	0.64	0.93	0.55	0.43	0.39	0.25

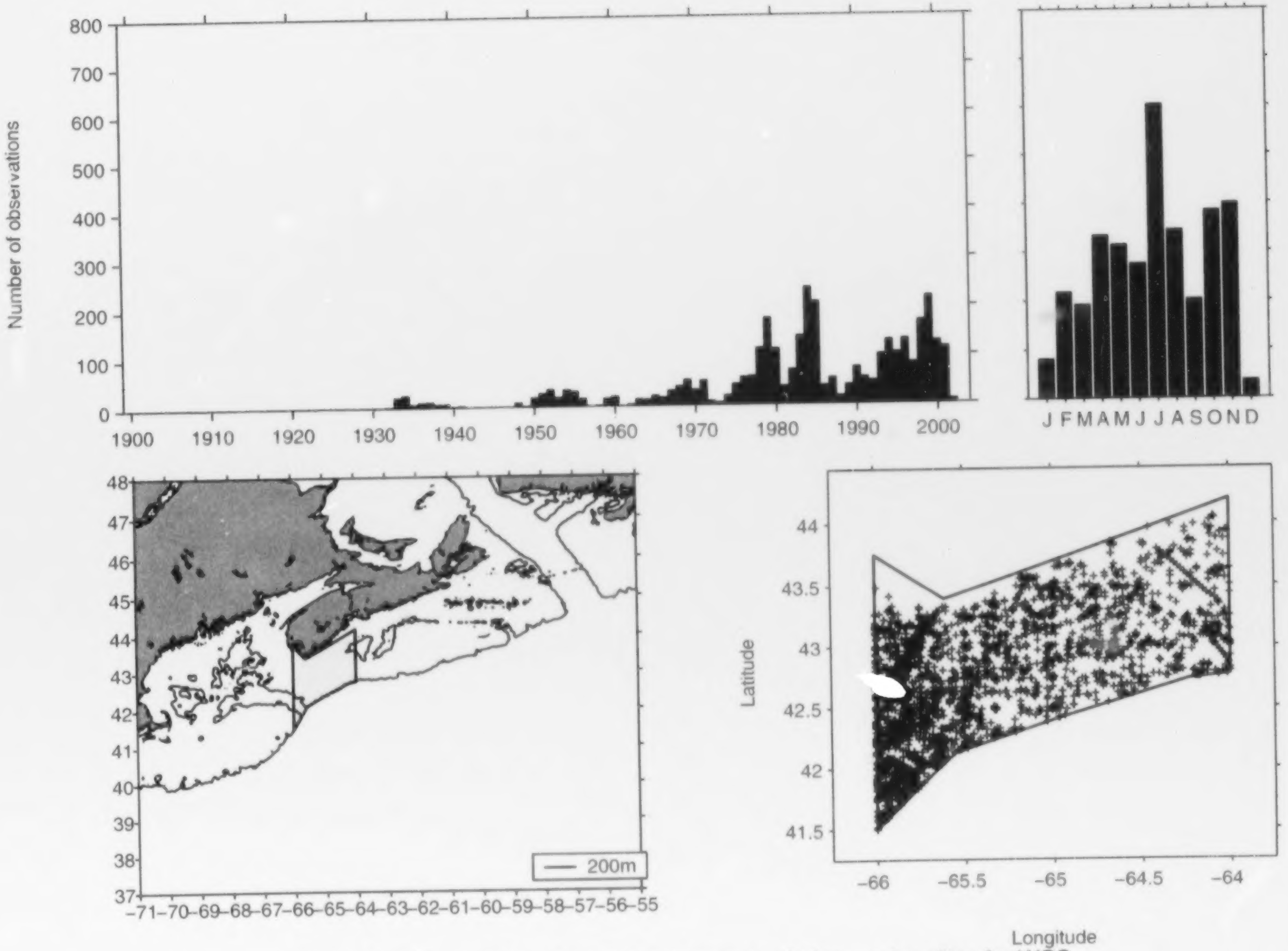

Figure 72a. Temporal and spatial distributions of observed profiles for WSS.

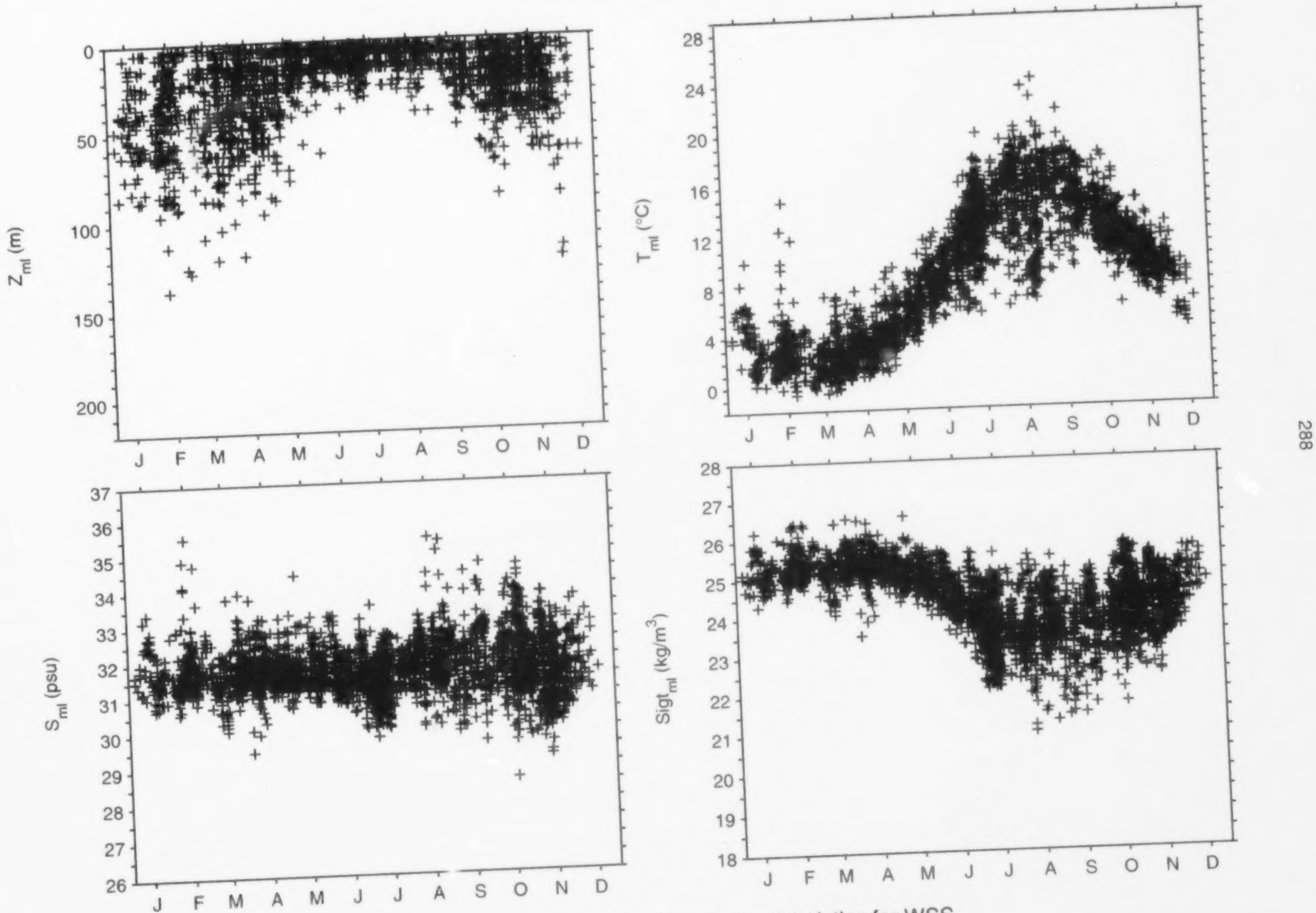

Figure 72b. Calculated mixed layer characteristics for WSS.

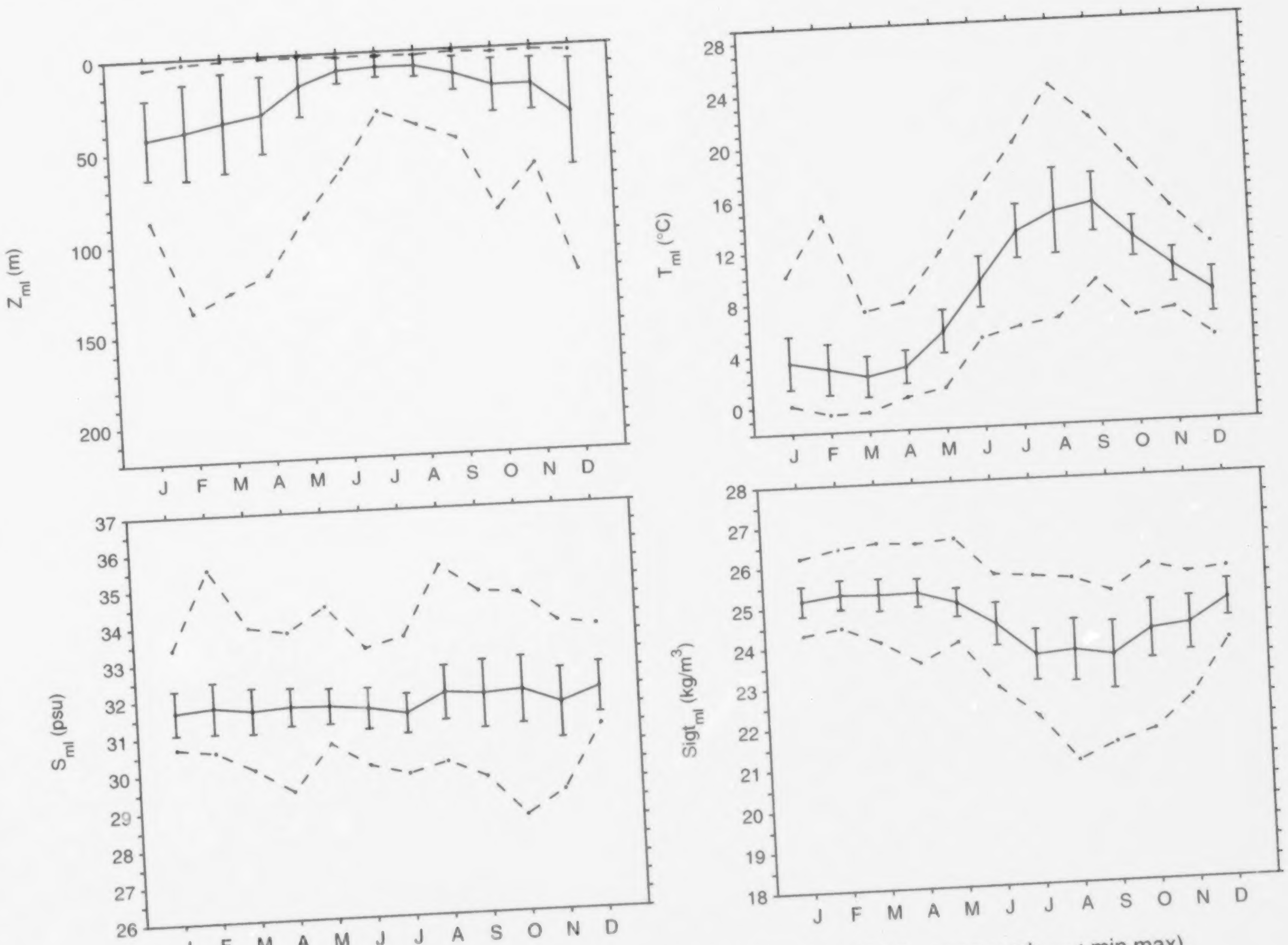

Figure 72c. Monthly statistics of mixed layer characteristics for WSS (– : mean±sd; –– : min,max).

Table 70. Monthly statistics of mixed layer characteristics for WSS.

Profiles extracted (#) : 4156 Profiles retained (#) : 3374 Profiles rejected (%) : 18.8
Mean seabed depth (m) for subregion : 119.9 Mean sounding depth (m) for profiles : 133.2

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	81	215	188	333	318	274	603	343	201	384	393	41
Mixed layer depth : Z_ml (m)												
mean	42.80	39.44	35.17	31.53	17.02	9.42	8.24	8.41	13.27	20.44	20.39	36.24
median	42.00	35.00	29.25	27.50	12.43	7.50	7.50	7.50	12.50	17.50	17.50	28.00
min	5.00	3.00	1.85	1.50	1.50	2.00	2.00	2.50	1.50	2.50	2.00	3.25
max	87.50	137.80	127.50	118.00	87.50	62.25	32.00	40.00	47.90	87.10	63.25	122.00
s.d.	21.28	25.60	26.74	20.69	16.29	6.94	5.47	5.84	8.99	14.16	13.85	28.43
Mixed layer temperature : T_ml (deg.C)												
mean	3.45	2.87	2.22	2.86	5.48	9.18	12.98	14.43	15.03	12.28	9.93	7.91
median	3.40	2.48	2.06	2.73	5.37	9.09	13.10	15.40	15.18	11.95	9.86	8.37
min	0.10	-0.64	-0.55	0.50	1.10	4.87	5.67	6.20	9.00	6.20	6.67	4.44
max	10.10	14.80	7.26	7.83	11.60	16.00	19.77	24.03	21.52	18.08	14.52	11.63
s.d.	2.06	1.98	1.59	1.29	1.66	1.95	2.09	3.28	2.24	1.58	1.34	1.71
Mixed layer salinity : S_ml (psu)												
mean	31.67	31.77	31.66	31.73	31.71	31.61	31.44	31.96	31.89	31.96	31.56	31.94
median	31.62	31.61	31.59	31.68	31.58	31.52	31.45	31.88	31.85	31.85	31.53	31.86
min	30.69	30.57	30.07	29.46	30.70	30.08	29.82	30.10	29.65	28.59	29.22	30.95
max	33.39	35.54	33.92	33.77	34.42	33.26	33.54	35.43	34.68	34.61	33.81	33.67
s.d.	0.60	0.70	0.62	0.51	0.48	0.55	0.54	0.74	0.92	0.91	0.95	0.69
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.16	25.29	25.26	25.28	25.00	24.42	23.62	23.70	23.54	24.16	24.27	24.87
median	25.13	25.24	25.26	25.24	24.97	24.38	23.59	23.68	23.65	24.14	24.28	24.96
min	24.31	24.46	24.07	23.52	24.01	22.85	22.11	20.99	21.40	21.69	22.47	23.86
max	26.22	26.43	26.55	26.49	26.59	25.66	25.59	25.50	25.15	25.78	25.55	25.65
s.d.	0.37	0.36	0.39	0.35	0.35	0.53	0.63	0.77	0.84	0.73	0.67	0.46

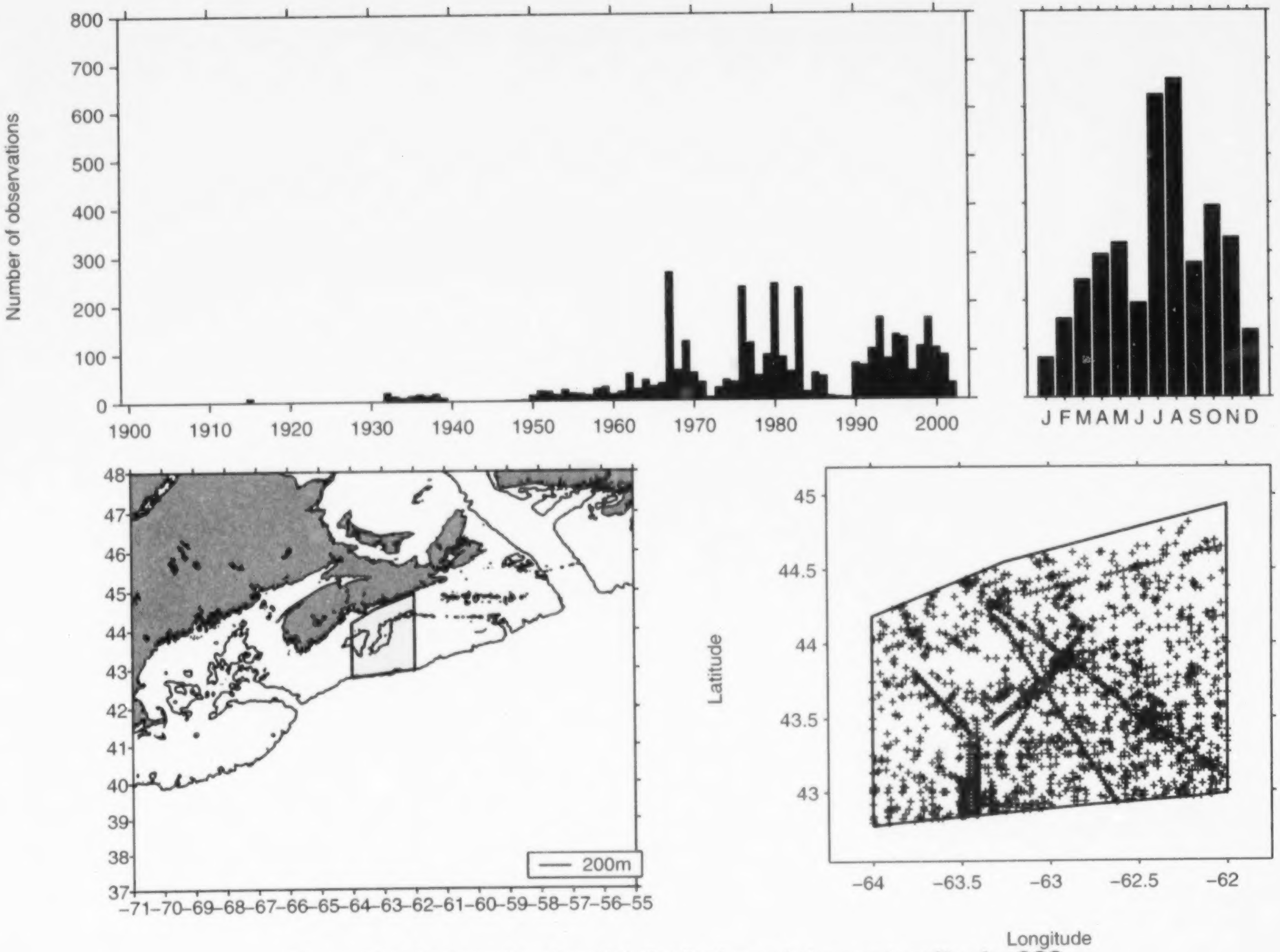

Figure 73a. Temporal and spatial distributions of observed profiles for CSS.

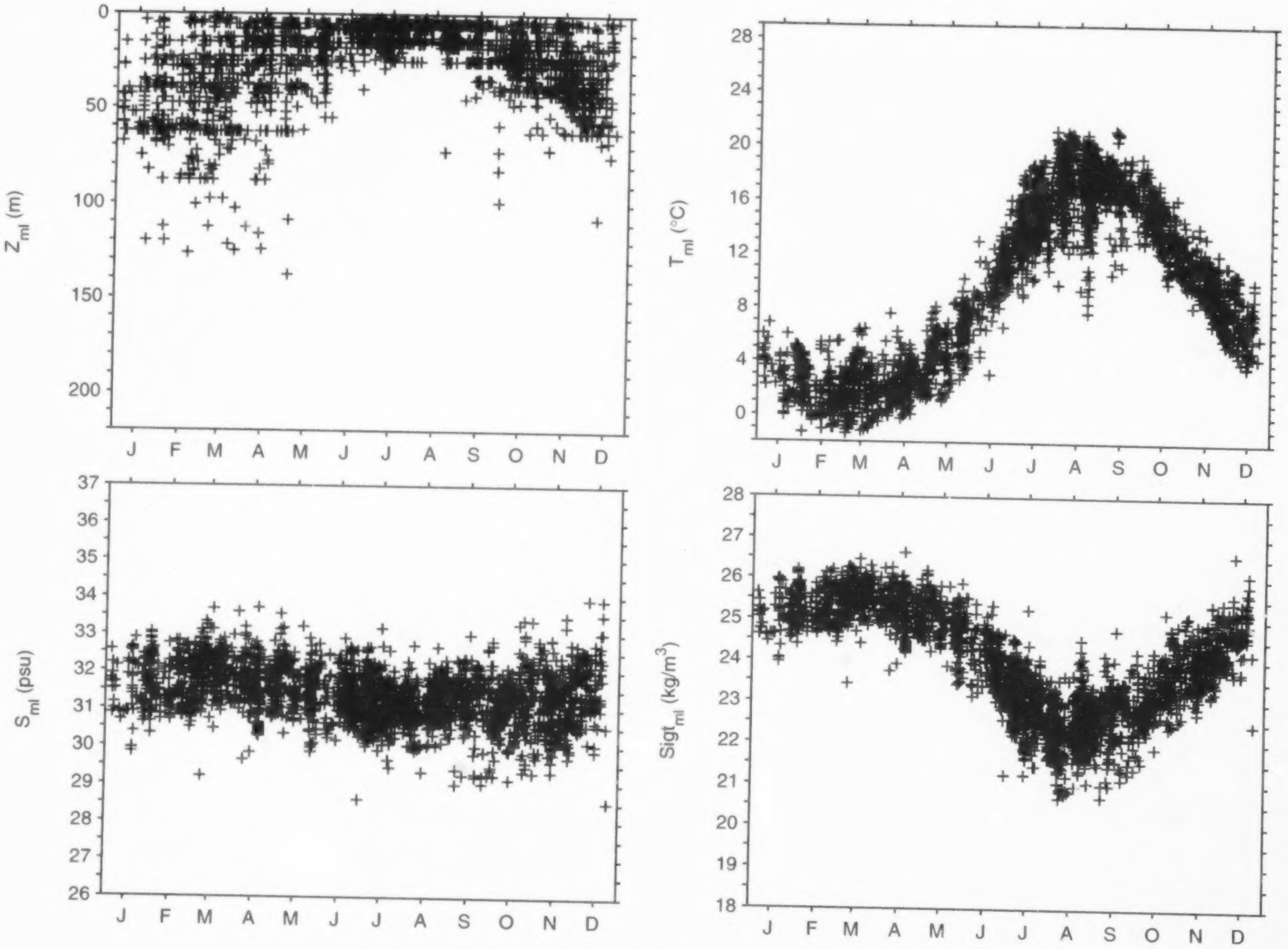

Figure 73b. Calculated mixed layer characteristics for CSS.

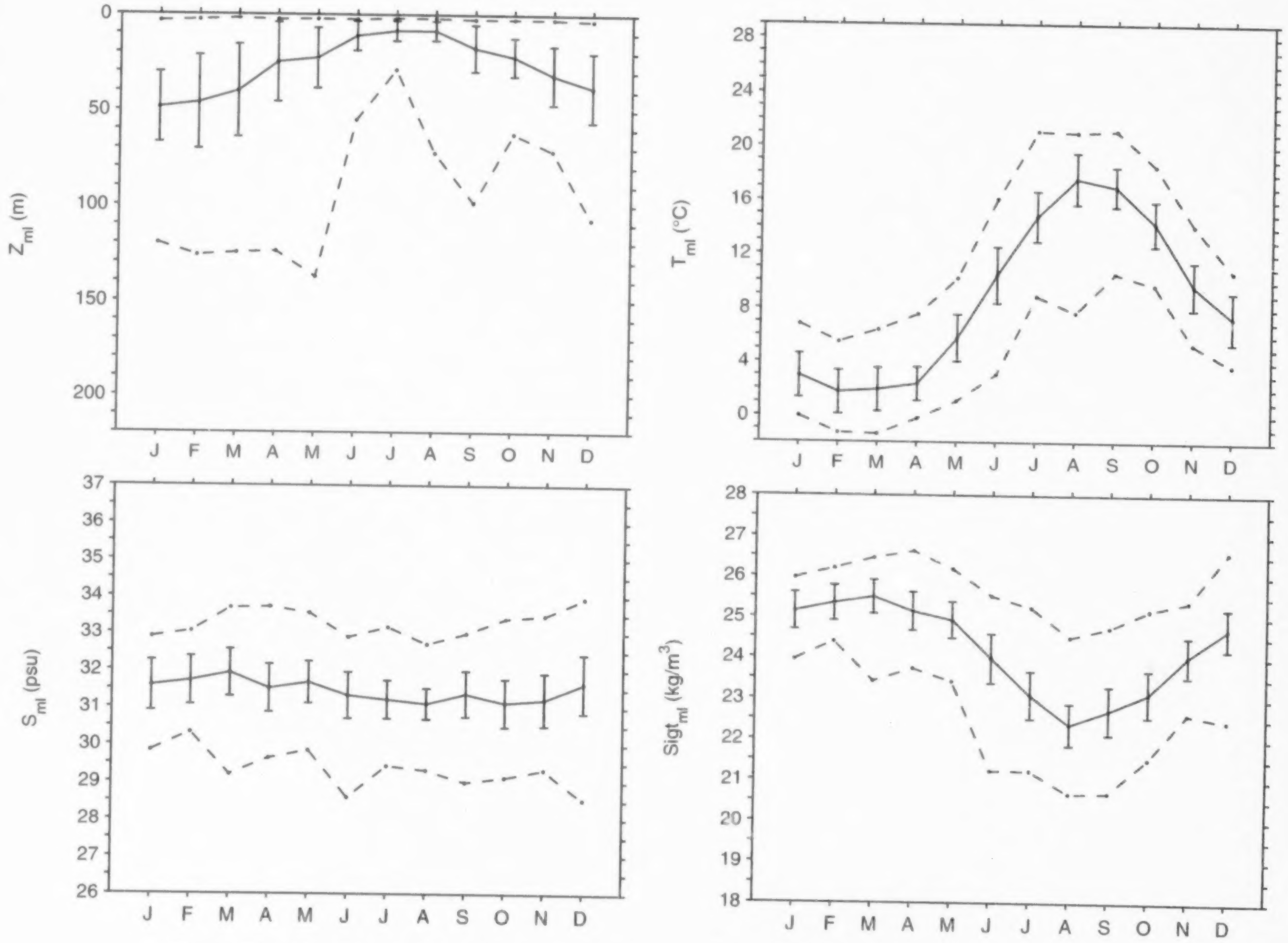

Figure 73c. Monthly statistics of mixed layer characteristics for CSS (– : mean±sd; -- : min,max).

Table 71. Monthly statistics of mixed layer characteristics for CSS.

Profiles extracted (#) : 4704 Profiles retained (#) : 3714 Profiles rejected (%) : 21.0
Mean seabed depth (m) for subregion : 144.5 Mean sounding depth (m) for profiles : 147.1

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	82	158	246	295	319	193	623	656	275	397	328	142
Mixed layer depth : Z_ml (m)												
mean	48.53	45.93	39.88	24.80	22.68	11.13	8.53	8.57	17.52	22.08	31.57	38.02
median	51.17	45.00	37.50	17.50	22.00	8.05	7.50	7.45	15.00	22.00	32.50	39.42
min	3.55	2.85	2.00	2.70	2.40	2.50	2.00	1.90	2.50	2.45	2.50	3.25
max	120.00	126.40	125.00	124.20	137.50	55.00	28.75	72.50	98.70	62.50	71.50	107.45
s.d.	18.44	24.50	24.21	20.63	15.61	7.66	5.21	5.05	12.11	9.91	15.22	18.09
Mixed layer temperature : T_ml (deg.C)												
mean	2.97	1.74	1.93	2.36	5.80	10.45	14.79	17.61	17.01	14.28	9.69	7.33
median	2.93	1.60	1.77	2.31	6.10	10.62	14.71	17.91	17.00	14.63	10.15	7.35
min	-0.05	-1.30	-1.39	-0.22	1.09	3.08	8.90	7.70	10.57	9.73	5.38	3.74
max	6.81	5.51	6.40	7.56	10.20	16.10	21.12	21.02	21.15	18.53	14.13	10.70
s.d.	1.64	1.61	1.62	1.24	1.76	2.06	1.87	1.90	1.46	1.66	1.74	1.89
Mixed layer salinity : S_ml (psu)												
mean	31.58	31.72	31.93	31.52	31.68	31.33	31.22	31.11	31.37	31.13	31.22	31.65
median	31.68	31.64	31.98	31.51	31.77	31.27	31.19	31.06	31.51	31.07	31.36	31.73
min	29.84	30.33	29.20	29.64	29.85	28.59	29.44	29.32	29.00	29.13	29.33	28.53
max	32.88	33.04	33.68	33.71	33.55	32.89	33.16	32.70	32.99	33.40	33.48	33.95
s.d.	0.68	0.64	0.63	0.64	0.56	0.62	0.51	0.42	0.62	0.64	0.71	0.79
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.14	25.34	25.50	25.15	24.94	23.99	23.09	22.37	22.72	23.13	24.03	24.71
median	25.15	25.34	25.53	25.15	24.93	23.98	23.10	22.35	22.80	23.04	24.05	24.69
min	23.94	24.38	23.42	23.73	23.42	21.23	21.23	20.68	20.70	21.53	22.63	22.46
max	25.96	26.20	26.46	26.63	26.19	25.53	25.25	24.51	24.75	25.18	25.39	26.59
s.d.	0.46	0.43	0.41	0.47	0.46	0.60	0.58	0.51	0.60	0.57	0.49	0.51

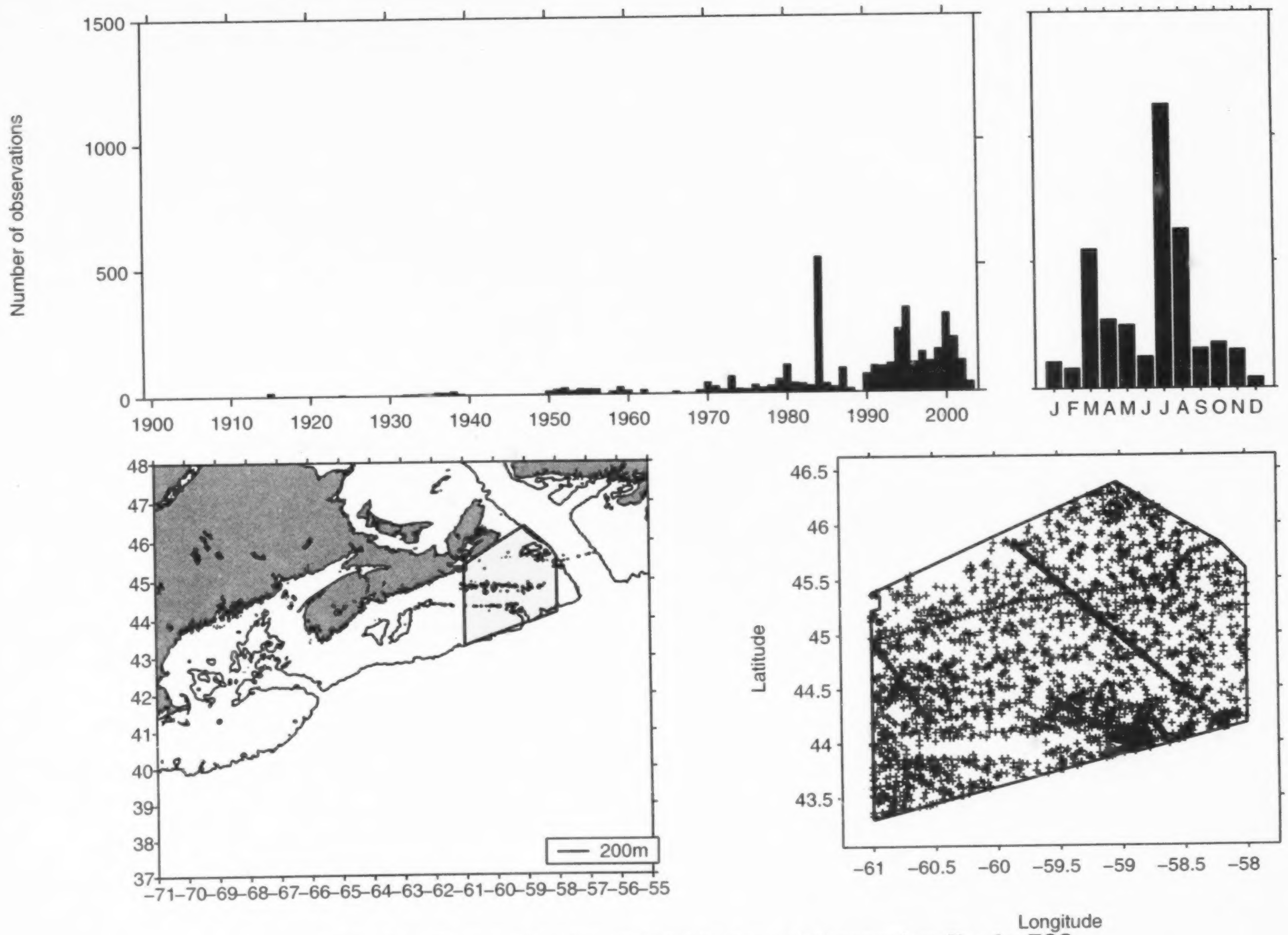

Figure 74a. Temporal and spatial distributions of observed profiles for ESS.

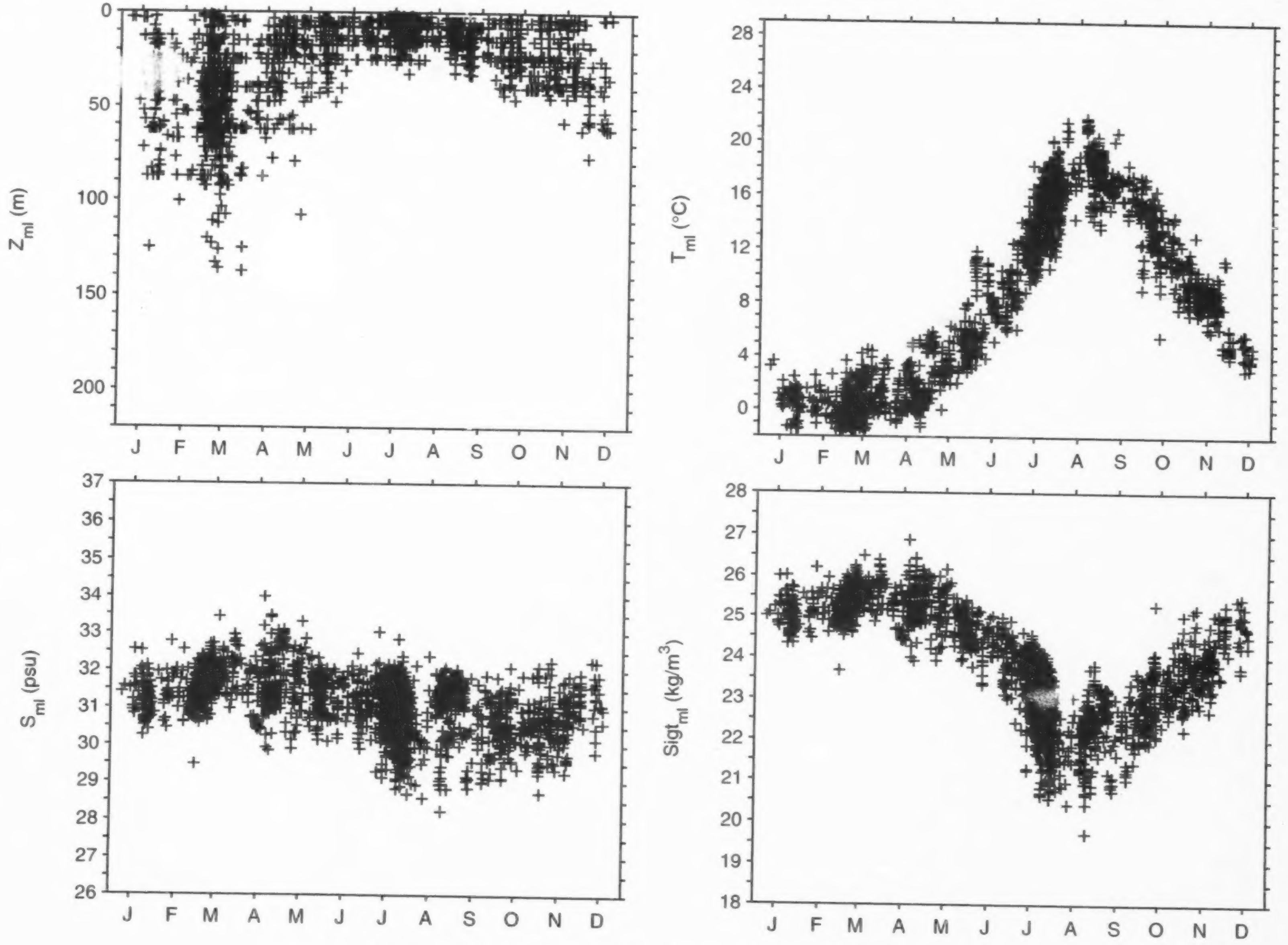

Figure 74b. Calculated mixed layer characteristics for ESS.

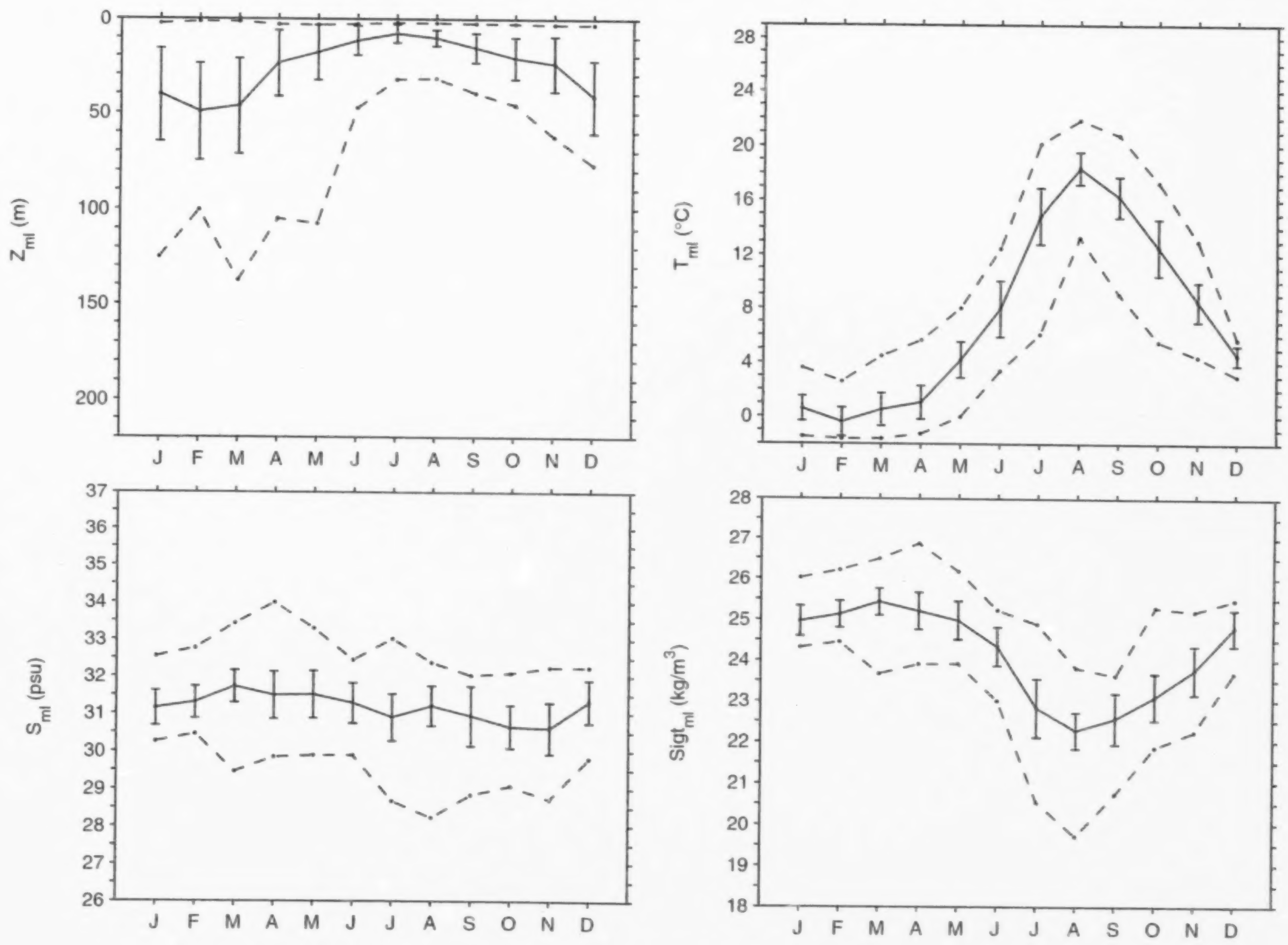

Figure 74c. Monthly statistics of mixed layer characteristics for ESS (– : mean±sd; –– : min,max).

Table 72. Monthly statistics of mixed layer characteristics for ESS.

Profiles extracted (#) : 4266   Profiles retained (#) : 3628   Profiles rejected (%) : 15.0
Mean seabed depth (m) for subregion : 119.5   Mean sounding depth (m) for profiles : 141.0

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	104	78	546	267	247	122	1120	625	155	176	148	40
Mixed layer depth : Z_ml (m)												
mean	40.38	49.28	46.30	23.71	18.00	11.63	7.82	10.16	15.56	21.08	24.13	41.51
median	33.75	52.50	47.50	17.00	15.00	8.25	7.50	7.95	15.00	22.50	25.00	41.25
min	2.50	1.50	1.50	3.00	3.25	2.75	2.00	2.10	2.35	2.50	3.00	3.00
max	125.00	100.50	137.50	105.00	107.50	47.50	32.50	32.00	39.80	46.00	62.50	77.00
s.d.	24.35	25.25	24.88	17.67	14.81	7.96	4.98	4.36	7.95	11.26	14.70	19.01
Mixed layer temperature : T_ml (deg.C)												
mean	0.59	-0.40	0.53	1.07	4.21	7.96	14.85	18.37	16.25	12.53	8.47	4.56
median	0.74	-0.52	0.41	0.86	4.20	8.08	15.13	18.51	16.60	12.26	8.48	4.61
min	-1.49	-1.65	-1.63	-1.27	0.00	3.40	6.08	13.29	9.02	5.55	4.44	3.02
max	3.60	2.61	4.49	5.64	8.00	12.49	20.15	21.87	20.77	17.30	13.03	5.70
s.d.	0.93	1.06	1.21	1.24	1.33	2.07	2.06	1.18	1.49	2.09	1.46	0.72
Mixed layer salinity : S_ml (psu)												
mean	31.15	31.31	31.74	31.50	31.52	31.29	30.91	31.21	30.95	30.66	30.62	31.32
median	31.05	31.29	31.79	31.37	31.57	31.37	30.96	31.34	31.20	30.56	30.68	31.37
min	30.26	30.46	29.47	29.85	29.90	29.90	28.68	28.24	28.84	29.08	28.72	29.81
max	32.55	32.77	33.44	33.99	33.31	32.45	33.03	32.39	32.04	32.10	32.25	32.25
s.d.	0.47	0.43	0.44	0.63	0.64	0.54	0.63	0.54	0.80	0.57	0.68	0.58
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	24.97	25.13	25.44	25.21	24.99	24.34	22.83	22.28	22.56	23.10	23.76	24.80
median	24.90	25.11	25.47	25.13	24.96	24.43	22.81	22.32	22.69	23.15	23.78	24.88
min	24.32	24.45	23.67	23.91	23.92	23.01	20.55	19.72	20.74	21.87	22.24	23.67
max	26.02	26.21	26.49	26.87	26.18	25.24	24.89	23.82	23.63	25.30	25.21	25.48
s.d.	0.37	0.33	0.32	0.45	0.47	0.48	0.72	0.44	0.62	0.58	0.60	0.45

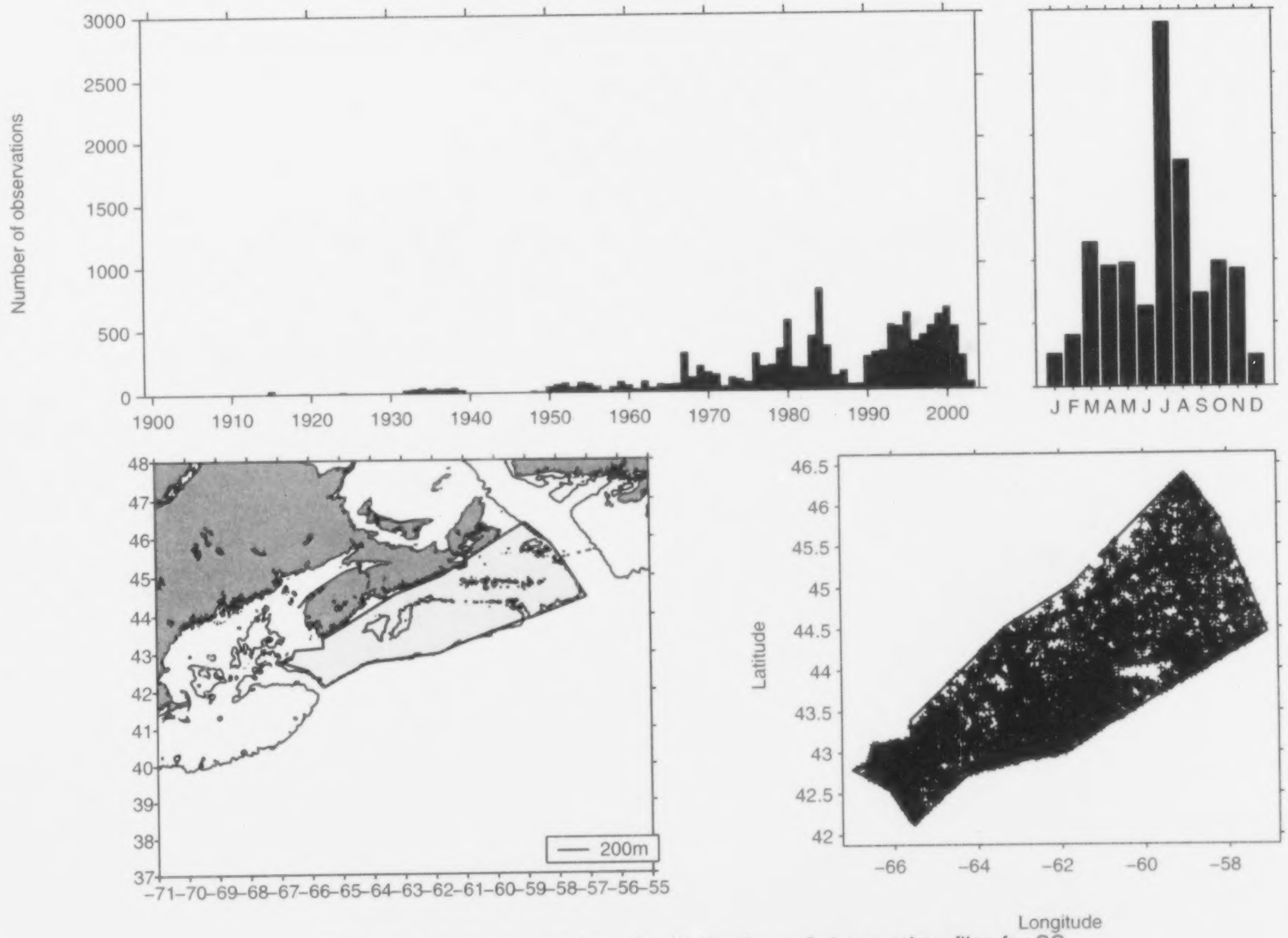

Figure 75a. Temporal and spatial distributions of observed profiles for SS.

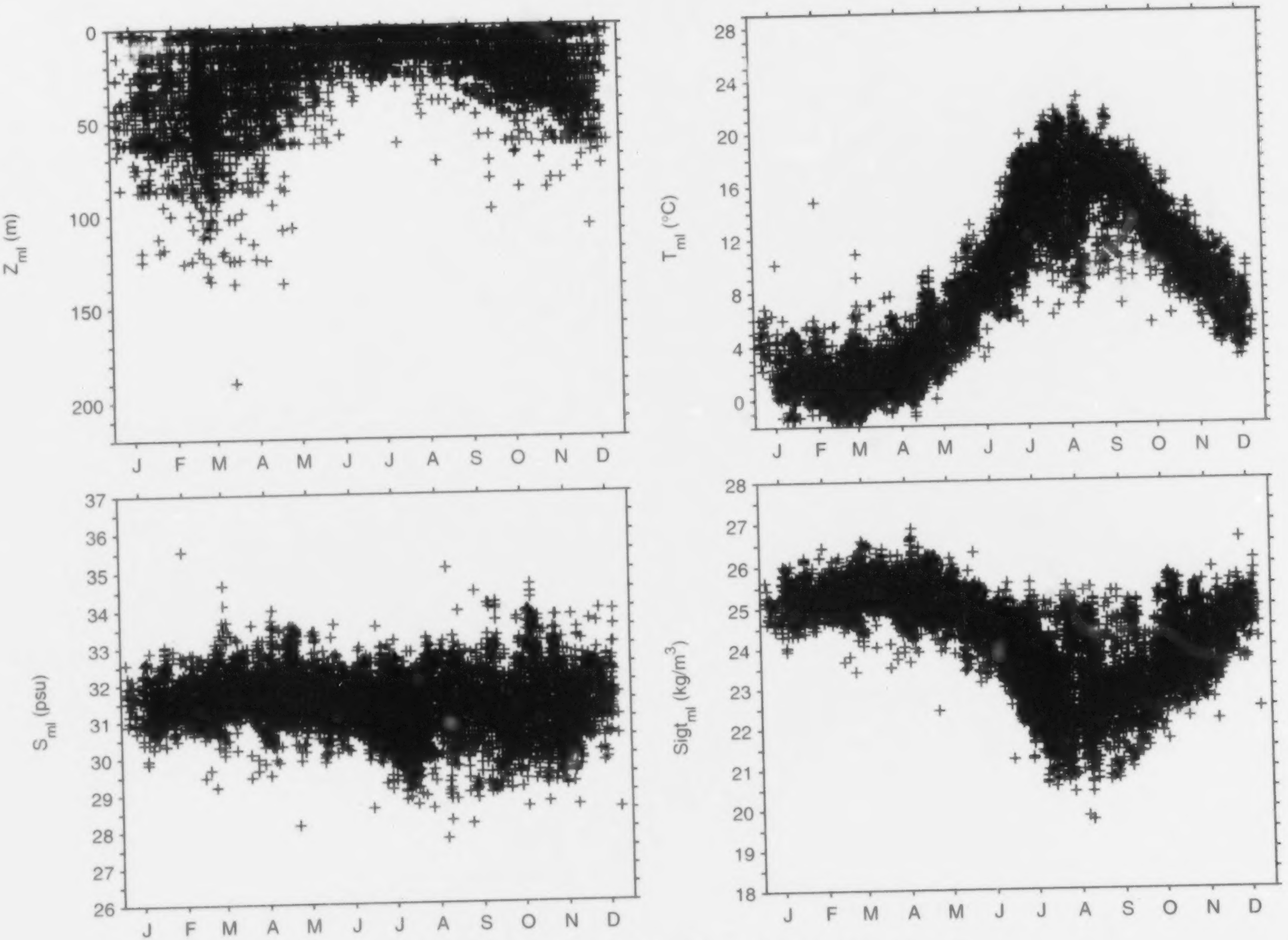

Figure 75b. Calculated mixed layer characteristics for SS.

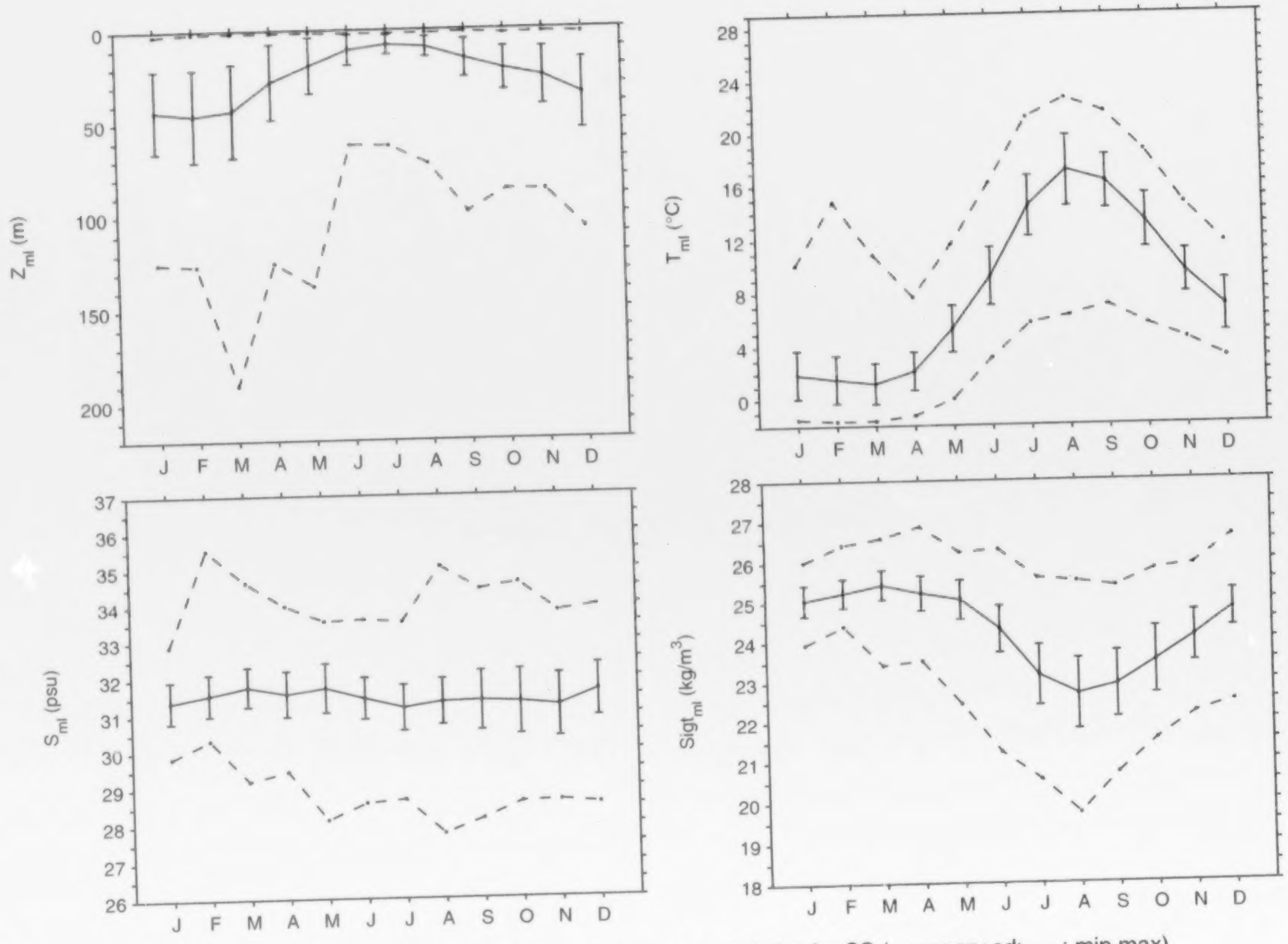

Figure 75c. Monthly statistics of mixed layer characteristics for SS (– : mean±sd; –– : min,max).

Table 73. Monthly statistics of mixed layer characteristics for SS.

Profiles extracted (#) : 14406   Profiles retained (#) : 11954   Profiles rejected (%) : 17.0
Mean seabed depth (m) for subregion : 124.1   Mean sounding depth (m) for profiles : 132.4

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	260	400	1138	961	980	628	2892	1792	733	991	930	249
Mixed layer depth : Z_ml (m)												
mean	43.45	45.69	43.19	27.72	19.08	10.74	8.06	9.29	15.69	21.45	25.71	35.45
median	42.50	45.00	42.50	22.20	15.00	7.75	7.50	7.60	15.00	22.00	25.00	37.30
min	2.50	1.50	1.50	1.50	1.50	2.00	2.00	1.90	1.50	2.45	2.00	2.50
max	125.00	126.40	190.00	125.00	137.50	62.00	62.50	72.50	98.70	87.10	87.50	107.45
s.d.	22.27	24.95	25.19	20.36	15.10	8.22	5.22	5.31	10.31	11.67	15.59	19.16
Mixed layer temperature : T_ml (deg.C)												
mean	1.91	1.52	1.19	2.12	5.27	9.17	14.41	17.04	16.19	13.23	9.45	6.83
median	1.37	1.54	1.09	1.99	5.30	9.14	14.59	17.92	16.57	13.21	9.51	6.71
min	-1.49	-1.65	-1.63	-1.27	0.00	3.08	5.67	6.20	6.97	5.55	4.44	3.02
max	10.10	14.80	10.86	7.67	11.60	16.10	21.12	22.56	21.52	18.53	14.52	11.63
s.d.	1.82	1.80	1.54	1.44	1.72	2.18	2.23	2.68	2.00	2.00	1.62	1.94
Mixed layer salinity : S_ml (psu)												
mean	31.38	31.57	31.79	31.59	31.74	31.46	31.20	31.35	31.37	31.33	31.22	31.63
median	31.30	31.45	31.81	31.54	31.70	31.45	31.22	31.33	31.44	31.22	31.24	31.60
min	29.84	30.33	29.20	29.46	28.14	28.59	28.68	27.75	28.15	28.59	28.62	28.53
max	32.88	35.54	34.65	33.99	33.56	33.60	33.54	35.06	34.44	34.61	33.80	33.95
s.d.	0.57	0.57	0.53	0.62	0.67	0.57	0.63	0.63	0.81	0.89	0.87	0.72
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.05	25.23	25.43	25.22	25.04	24.30	23.14	22.67	22.90	23.48	24.07	24.76
median	25.03	25.17	25.46	25.19	24.98	24.32	23.15	22.44	22.85	23.29	24.05	24.77
min	23.94	24.38	23.42	23.52	22.44	21.23	20.55	19.72	20.70	21.53	22.17	22.46
max	26.02	26.43	26.59	26.87	26.25	26.30	25.59	25.50	25.36	25.78	25.90	26.59
s.d.	0.40	0.37	0.37	0.44	0.50	0.58	0.75	0.88	0.83	0.82	0.63	0.47

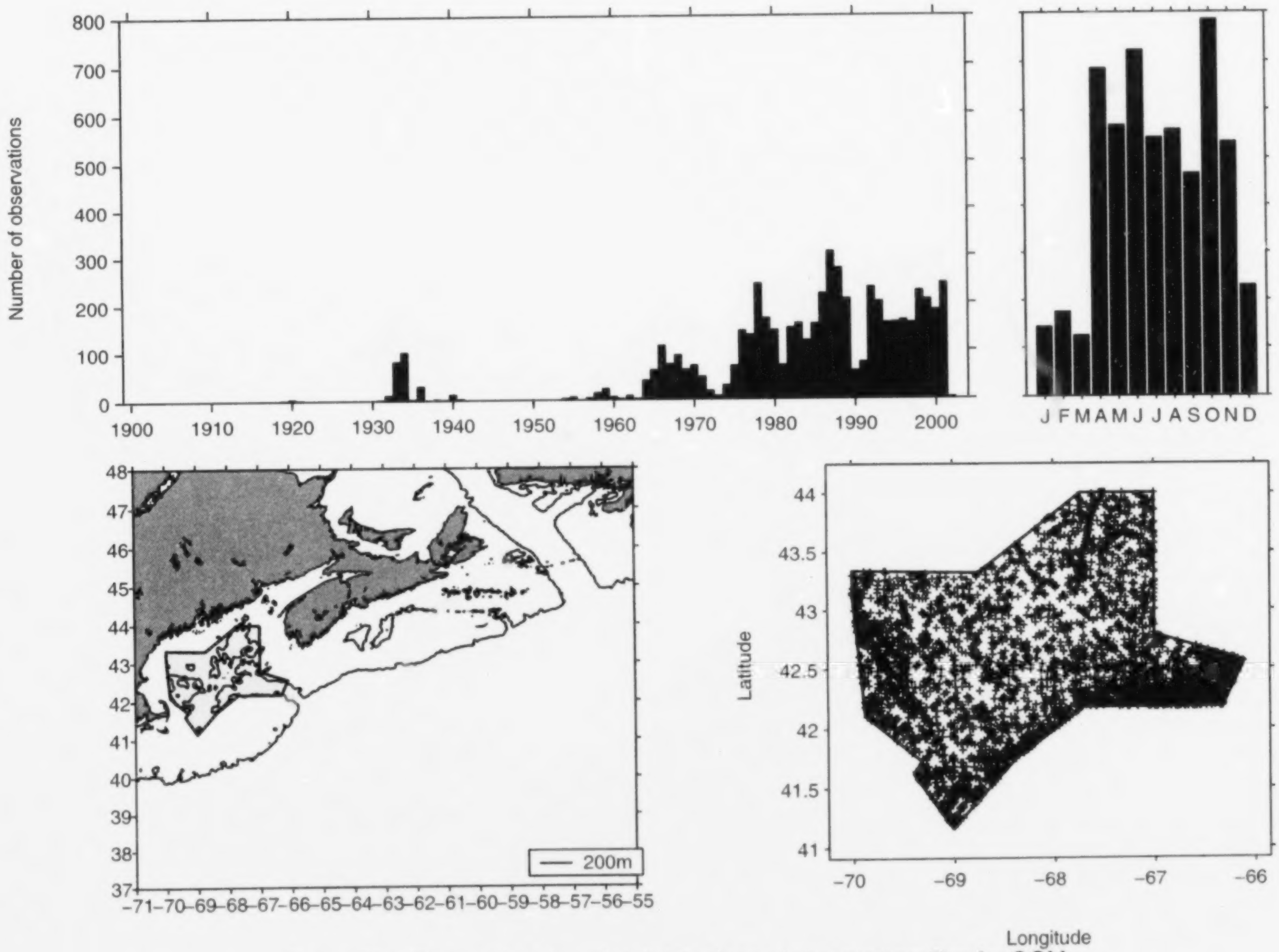

Figure 76a. Temporal and spatial distributions of observed profiles for GOM.

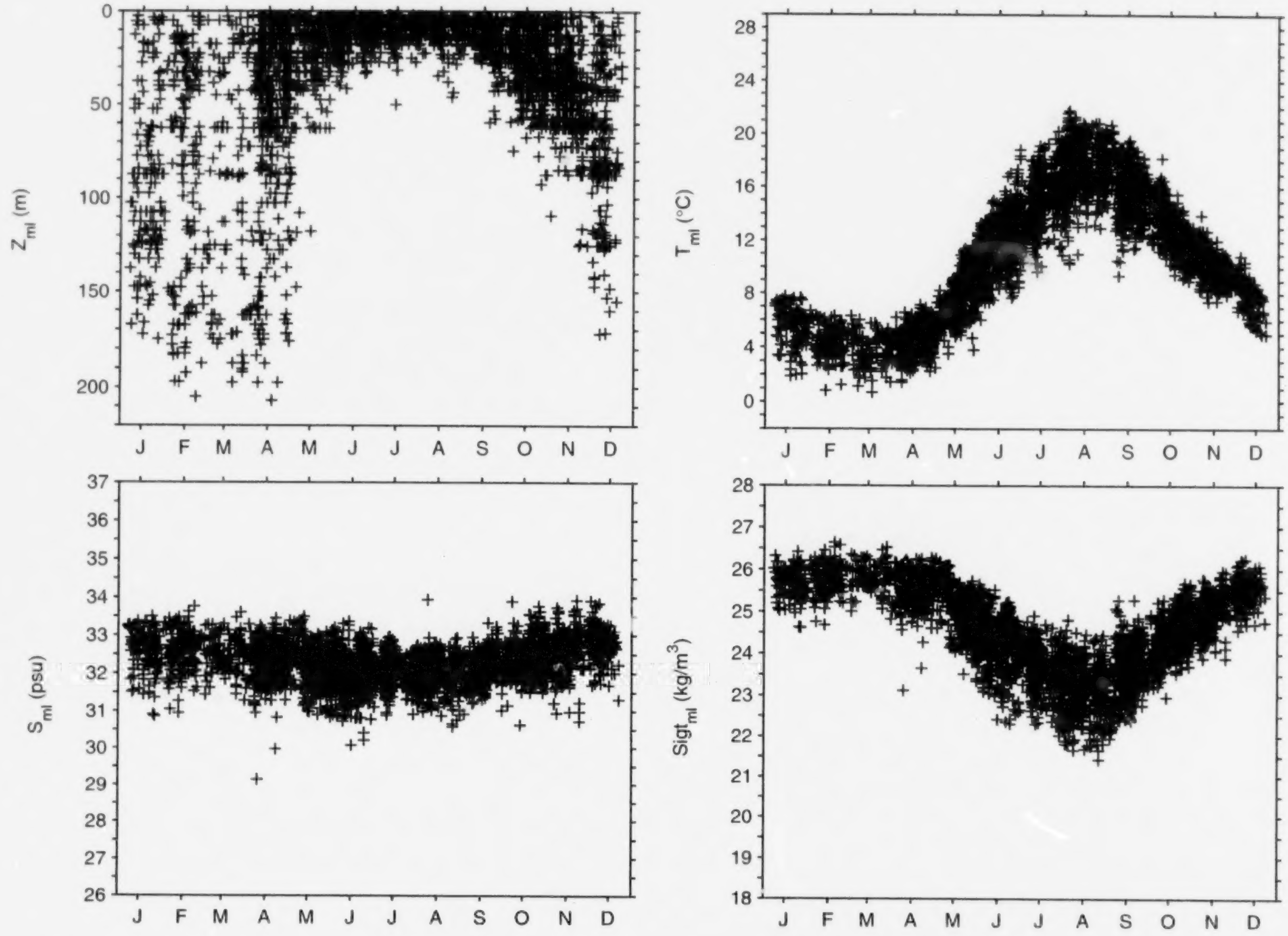

Figure 76b. Calculated mixed layer characteristics for GOM.

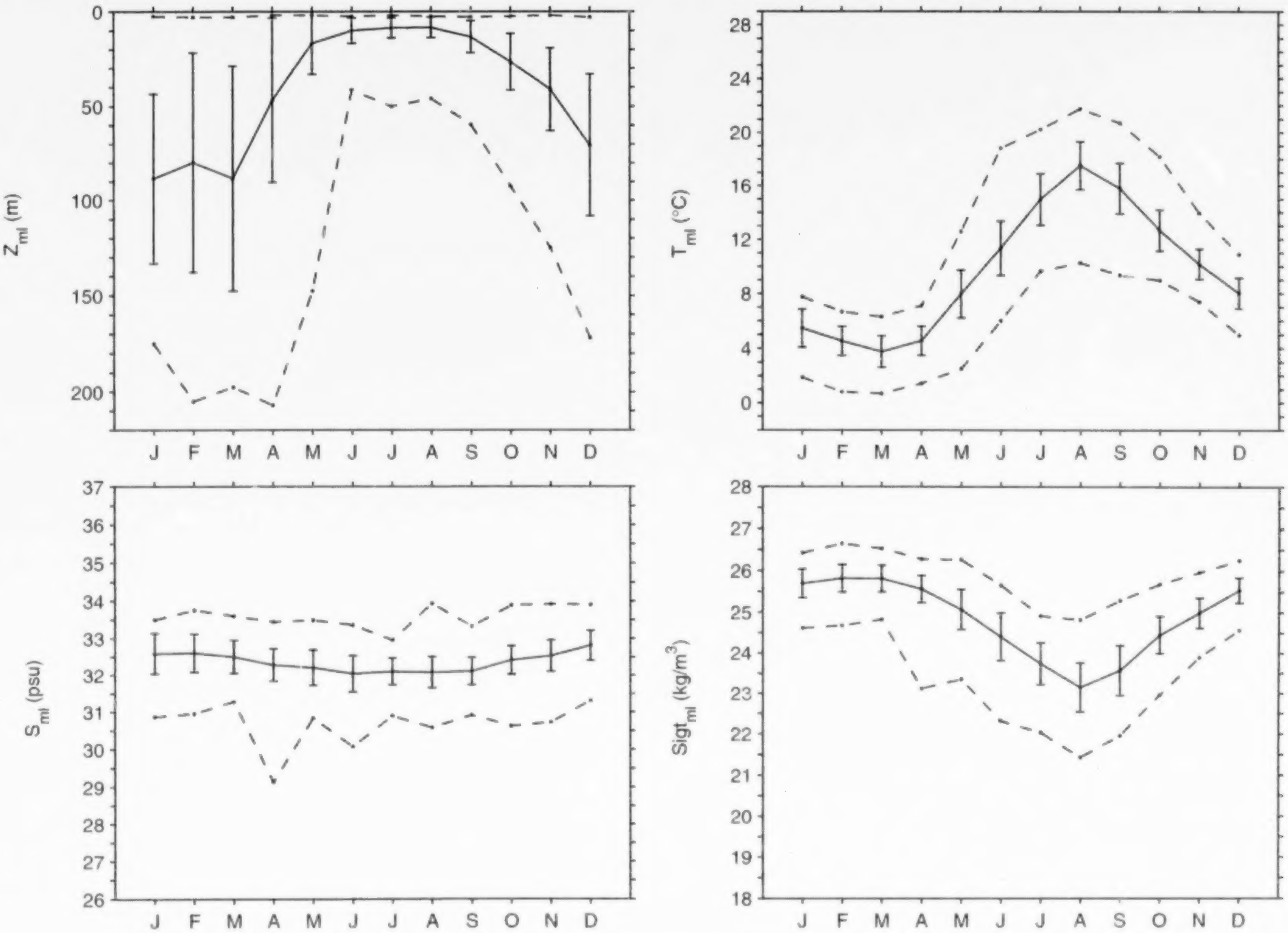

Figure 76c. Monthly statistics of mixed layer characteristics for GOM (– : mean±sd; –– : min,max).

Table 74. Monthly statistics of mixed layer characteristics for GOM.

Profiles extracted (#) : 6672 Profiles retained (#) : 5534 Profiles rejected (%) : 17.1
Mean seabed depth (m) for subregion : 189.8 Mean sounding depth (m) for profiles : 200.4

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Number of observations												
count	144	175	125	685	559	727	543	560	469	781	536	230
Mixed layer depth : Z_ml (m)												
mean	88.36	79.81	88.17	46.79	16.62	9.98	8.57	8.36	13.25	26.50	41.05	70.65
median	92.50	62.50	87.50	37.25	12.50	7.75	7.50	7.50	12.50	25.00	41.00	72.45
min	2.50	3.00	3.00	2.00	2.00	2.50	2.00	2.50	2.90	2.50	2.00	3.00
max	175.00	205.00	197.50	207.00	147.65	41.50	50.00	46.00	59.50	92.50	125.00	172.00
s.d.	44.92	58.02	59.44	43.47	16.58	6.68	5.27	5.37	8.37	15.00	21.84	37.54
Mixed layer temperature : T_ml (deg.C)												
mean	5.47	4.55	3.77	4.56	7.99	11.34	14.99	17.52	15.79	12.67	10.18	8.04
median	5.73	4.67	3.78	4.63	7.88	11.31	15.00	17.53	15.89	12.52	10.24	8.17
min	1.88	0.82	0.70	1.44	2.52	6.01	9.65	10.26	9.35	8.97	7.40	4.96
max	7.76	6.68	6.30	7.12	12.58	18.82	20.23	21.76	20.70	18.19	13.94	10.89
s.d.	1.38	1.06	1.14	1.05	1.75	2.01	1.93	1.81	1.89	1.52	1.11	1.12
Mixed layer salinity : S_ml (psu)												
mean	32.59	32.61	32.51	32.29	32.21	32.05	32.11	32.09	32.12	32.42	32.53	32.81
median	32.68	32.70	32.54	32.30	32.24	32.02	32.15	32.14	32.09	32.43	32.55	32.87
min	30.87	30.95	31.28	29.14	30.84	30.08	30.89	30.58	30.92	30.62	30.72	31.31
max	33.50	33.76	33.61	33.45	33.49	33.36	32.96	33.94	33.33	33.90	33.92	33.91
s.d.	0.55	0.52	0.45	0.44	0.48	0.49	0.36	0.42	0.37	0.39	0.42	0.41
Mixed layer sigma-t : Sigt_ml (kg/m^3)												
mean	25.70	25.82	25.81	25.56	25.07	24.40	23.73	23.15	23.56	24.45	24.99	25.54
median	25.73	25.87	25.84	25.59	25.12	24.45	23.80	23.18	23.56	24.47	24.95	25.57
min	24.61	24.68	24.82	23.12	23.34	22.31	22.03	21.43	21.95	22.96	23.89	24.57
max	26.42	26.64	26.53	26.28	26.26	25.65	24.91	24.81	25.29	25.69	25.97	26.25
s.d.	0.34	0.33	0.32	0.33	0.49	0.59	0.52	0.61	0.62	0.46	0.37	0.30